# **Receiving Report**

	Date: $\frac{\sqrt{5-62}}{\sqrt{15-62}}$	<u>-</u> 19.	•	Batch No: Dart P/O:	13	1404 1404	) +
Packing Slip: Invoice: Receipt: New Supplier Discrepancie:		_	Waybill At	Complete: pection	Yes	No No	
Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number
					:		
			475.			ļ 	
					<u>.</u>		
Deaduatio - /A				Initials of	Receiver	QC12	
Production/Ad Date Received/Cos Initial	-					Location	on

H:\FORMS\Purchasing\approved purch\RECREPORT Rev F



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

# **PURCHASE ORDER**

# Purchase Order ID PO27404

Purchase Order Date 2/11/2015 PO Print Date 2/11/2015

Page Number 1 of 3

Order From:

KLX INC.

88289 EXPEDITE WAY

VU-KLX01

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 

CHICAGO, IL 33172

**USA** 

Contact Name

**Vendor Phone** 

**Ship To Contact** 

Ship To Phone

Reference

305-925-2600

FedEx Overnight collect

Buyer

Chantal Lavoie

**Customer POID** 

Customer Tax #

10127-2607

Terms

Net 30 USD

Currency **FOB** 

Destination-Collect

Ship Via: Ship Acct:

Line

Nhr

Req Date/ CD Req Qty/ Description/ Unit of Mfg ID Taxable Vendor Part Number Measure **Promise Date** 

Line Comments **Delivery Comments** 

600.00

\$0.03 \$18.00

MS20426AD3-8

RIVET

3/12/2015 Yes 3/12/2015

Each

Line Total:

**PO Unit Price** 

\$18.00

Extended

Price

NAS6604D16

Bolt

3/12/2015 FN Yes

3/12/2015

50.00 Each \$0.97

\$48.50

MS21059L3

Nut Plate

3/12/2015 FN Yes

3/12/2015

300.00 Each

\$0.39

\$117.00

\$48.50

5015-02-19

Line Total:

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

# **PURCHASE ORDER**

# Purchase Order ID PO27404

Purchase Order Date 2/11/2015 PO Print Date 2/11/2015

Page Number 2 of 3

Order From:

KLX INC.

88289 EXPEDITE WAY

VU-KLX01

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 

CHICAGO, IL 33172

**USA** 

**Contact Name** 

**Vendor Phone** 

305-925-2600

**Ship To Contact** 

Ship To Phone

Ship Via:

Ship Acct:

FedEx Overnight collect

Buyer

**Customer POID** 

Customer Tax # Terms

Net 30

Currency

USD

10127-2607

**FOB** 

Destination-Collect

Chantal Lavoie

MS27039-4-22

Screw

3/12/2015 FN

Yes

50.00 Each Line Total:

Line Total:

\$117.00

3/12/2015

Each

\$0.60

\$30.00

MS27039-4-21

Screw

3/12/2015

Yes 3/12/2015 50.00

\$0.60

\$30.00

\$30.00

Line Total:

\$30.00

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

# **PURCHASE ORDER**

# Purchase Order ID PO27404

Purchase Order Date 2/11/2015 PO Print Date 2/11/2015

Page Number 3 of 3

Order From:

VU-KLX01

Ship To:

DART AEROSPACE LTD

KLX INC.

88289 EXPEDITE WAY

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 

CHICAGO, IL 33172

**USA** 

305-925-2600

Buver

Chantal Lavoie

**Contact Name Vendor Phone** 

**Customer POID** 

**Ship To Contact** 

Customer Tax # **Terms** 

**FOB** 

10127-2607 Net 30

Ship To Phone

Currency

USD

Ship Via: Ship Acct:

FedEx Overnight collect

Destination-Collect

71401-45

PROCUREMENT **QUALITY CLAUSES**  3/12/2015

No

1.00

\$0.00

\$0.00

3/12/2015

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT

A033 STATEMENT OF CONFORMITY/TEST RECORDS

FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A043 RETENTION OF QUALITY DOCUMENT

D15-03-19

Line Total:

\$0.00

PO Total:

\$243.50

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explaination.

Change Nbr:

3

Change Date:

2/11/2015

عظنو	REVENUE CANADA	REVENU CANADA	CANADA CUS				Page
, —	CUSTOMS AND EXCISE		TURE DES DO				1 of de 2
1. Vendor	(Name and Address)/Vendeur (Nom et	t adresse)	2. Date of Direct S	hipment to (	Canada/Date d	'expédition directe vers	la Canada
KLX	(Inc.		02/17/2	015			
	. Box 025263		3. Other Reference	es (include S	urchasar's On	der No.)	
			Autres référenc	es (inclure le	n° de comma	nde de l'acheteur)	
Mia	mi, FL 33102-5263	,	PO#: 1	Multiple	e See	tem 12	
4 Consiss	nee (Name and Address)/Destinataire (	(Nom et adresse)	5. Purchaser's Na				
•	,	(Note of autosoc)	Nom et adresse	de l'achete			
	T AEROSPACE LTD		DART AEROSE 1270 ABERDEI HAWKESBURY	PACE LTD			
	ABERDEEN ST		HAWKESBURY CANADA K6A	r ON 1K7			
	KESBURY, ON						
CAN	ADA K6A 1K7		6. Country of Tran		ays de transb	ordement	
			CANAD			IE CHIDNENT INC. LICE	ES GOODS OF DIFFERENT ORIGINS
			7. Country of Origine of Pays d'origine origine origine origine origine origine origine origine origin		ndises	ENTER ORIGINS AGAIL	25 GOODS OF DIFFERENT ORIGIN: NST ITEMS IN 12 IO DES MARCHANDISES D'ORIGINES
			USA			DIFFÉRENTES, PRÉCISER L	EUR PROVENANCE EN 12.
8. Transpo	ortation: Give Mode and Place of Direct	t Shipment to Canada	9. Conditions of Si (i.e. Sale, Cons	ales and Ter	ms of Paymen	t   Goods, etc.)	
Transpo	ort: Préciser mode et point d'expédition	i uirecte vers le canada	Conditions de v	ente et mod	alités de paim	ent	as atc.)
cer	X INTL P1 COLL		•	xpealtion en	consignation, i	location de marchandis	oa, ow.j
FEL	W INTELL OOF		NET 45				
			10. Currency of Set				
	•			U.	S. Curr	ency	
11. No. of	12. Specification of Commodities (Kin	d of Packages, Marks and Numbers, General		13. Qua	ntity Unit)	Selling Price	a/Prix de vente
Pkgs N <sup>bre</sup> de	Description and Characteristics, i. Désignation des articles (Nature of	des colis, margues et numéros, description gei	nérale	Qua	ntité 1	4. Unit Price Prix unitaire	15. Total
colis	et caractéristiques, p. ex. classe,	qualité) Invoice#: HYF\		(PTOCISE	or l'unité)	r rix drintan e	
1	PO#: 27458	Invoice#. HTF	**^_		20	2.150 /EA	43.00
	AN3C34A	BOLT			20	2.650 /EA	53.00
	AN6-41A MS20615-4M20	RIVET, SOLID	•		100	0.350 /EA	35.00
	MS20615-4M20 MS21059L3K	LOCKNUT, PL			700	0.670/EA	469.00
	MS21039L3K	LOCKNUT		<del> </del>	100	1.550 /EA	155.00
	MS24693-C273	SCREW		1	50	0.300/EA	15.00
	MS24694S148	SCREW		ĺ	45	8.400 /EA	378.00
	MS24694S154	SCREW			50	1.050 /EA	52.50
	MS24694S50	SCREW		1	200	0.080 /EA	16.00
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		U.S. Cu	ırrencv				
18				16. T	otal Weight/Po	oids Total	17. Invoice Total Total de la facture
	f fields 1 to 17 are included on an attac enseignements des zones 1 à 17 figure	ched commercial invoice, check this box. ent sur la facture commerciale, cocher cette bo	olte.	Net	C	Gross/Brut	
	ercial Invoice No./N° de la facture comr			<u> </u>		48 lb 0oz	2,488.80
19. Exporte	r's Name and Address (if other than Ve	endor)	20. Originator (Nam	e and Addre	ss)/Expéditeur	d'origine (Nom et adre.	sse)
Nom et	adresse de l'exportateur (S'il diffère di	u vendeur)			$\prec$		
	(Inc.	<b>&gt;</b> F		/	/ )		
	00 NW 15 TERRAC	<b>,</b> E			ffica Ma	nager	
	MI, FL 33172		100/	<i></i>	ffice Ma		
21. Departr	mental Ruling (if applicable)/Décision d	du Ministère (S'il y a lieu)	22. fields 23 to 25	5 are not app	ilicable, check	this box ner cette boite	$\checkmark$
			<u> </u>	a 23 SUN S	25. Check (if		
23. If includ	ded in field 17 indicate amount: pris dans le totel à la zone 17, préciser	24. If not included in field 17 in Si non compris dans le tot	dicate amount: al à la zone 17, précis	er:	Cocher (S	'il y a lieu):	
	nsportation charges, expenses and ins	(i) Transportation charges	expenses and insura		noid o	y payments or subsequence of payable by the purcha	iser
fror	n the place of direct shipment to Canad s trais de transport, dépenses et assurs	da to the place of direct st ences Les frais de transport,	nipment to Canada décenses et assuranc	es	De red	devances ou produits of s par l'acheteur	nt été ou seront
àρ	artir du point d'expeédition directe vers nada	s le jusqu'au point d'expéd	idon directevers le Cal	iaud	70130		
		s					
\$_ 60 C=	sts for construction, erection and asser	mbly (ii) Amounts for commissi	ons other than buying				
inc	urred after importation into Canada	commissions Les commissions autro			(ii) The n	urchaser has supplied	goods or services
d'a	s couls de construction, d'alection et essemblage après importation au Cana	da pour l'achat			for us	e in the production of the	iese goods handises ou des
\$					servic	es pour la production d	es marchandises
(iii) Ex	port packing	(iii) Export packing Le coût de l'emballage	d'exportation				
Le	coût de l'emballage d'exportation	Fa cont na i autoanage	coperationers			لـــا	
\$_		<u> </u>			MINISTÈDE O	LI REVENU NATIONAL	DOUANES ET ACCISE
		TOMO AND EVOICE			WINIO I EKE U	O VEATIAN INVIDIANT	



Revenue Canada Customs and Excise Revenu Canada Douanes et Accise

# CONTINUATION SHEET FEUILLE SUPPLÉMENTAIRE

Page 2

of 2

1. Vendor (Name only)/Vendeur (Nom seulement)

KLX Inc.

2. Other References (inc.

Autres références (inc.)

2. Other References (include Purchaser's Order No.)
Autres références (inclure le n° de commande de l'acheteur)

	A ITTO.		PO#: N	Aultiple See I	tom 6	
•	nee (Name only)/Destinataire (Nom seulement)		FU#: N	uninhie See I	CIII O	
4. Purcha	ser if other than Consideree and/or Importer (Name only)					
	ser if other than Consignee and/or Importer (Name only) ur, s'il diffère du destinataire et (ou) de l'importateur (No	m seulement)				
	T AEROSPACE LTD			Tag Overstan I		
5. No. of Pkgs Nore de	Specification of Commodities (Kind of Packages, N Description and Characteristics, i.e. Grade, Quality Désignation des articles (Nature des colls, margue et caractéristiques, p. ex. classe, qualité)	larks and Numbers, General		13. Quantity (State Unit)	Selling Price/Pri	
N <sup>bre</sup> de colis	Désignation des articles (Nature des colls, margue et caractéristiques, p. ex. classe, qualité)	s et numéros, description gén	érale	Quantité (Préciser l'unité)	14. Unit Price 15. Prix unitaire	Total
	PO#: 27458	Invoice#: HYFV				
	NAS1149C0332R	WASHER, FLA		2000	0.020 /EA	40.00
	NAS1149D0363J	WASHER, FLA		2000	0.020/EA	60.00
	NAS1149D0363J	WASHER, FLA		1200	0.050/EA	60.00
	NAS 1 149D00033	WASHEN, I'LA	· I	1200	0.050/EA	60.00
	PO#: 27404	Invoice#: HYFV	VY0	]		
	MS20426AD3-8	RIVET, SOLID		600	0.030 /EA	18.00
	MS27039-4-22	SCREW		50	0.600 /EA	30.00
	MS27039-4-21	SCREW		50	0.600 /EA	30.00
					,	
1	PO#: 27458	Invoice#: HYFV	VXZ			
	AN3C3A	BOLT		100	0.250 /EA	25.00
	AN4C6A	BOLT		300	0.500/EA	150.00
	AN6-40A	BOLT		50	1.970 /EA	98.50
	MS20470AD4-6	RIVET, SOLID		3030	0.010 /EA	30.30
	MS20600AD4W5	RIVET, BLIND		200	0.240 /EA	48.00
	MS20601AD4W3	RIVET, BLIND		500	0.220 /EA	110.00
	MS21042L4	NUT, SELF-LO	CKING	1600	0.170 /EA	272.00
	MS21043-6	NUT, SELF-LO		100	1.350 /EA	135.00
	101021040-0			100	1.330 / 2.11	133.00
	PO#: 27404	Invoice#: HYFV	VY0			
	NAS6604D16	BOLT		50	0.970/EA	48.50
	MS2 <del>1059</del> L3	LOCKNUT, PLA	ATE - TWO	300	0.390/EA	117.00
÷		į !				
		U.S. Cur	rency		J REVENU NATIONAL – DO	



INVOICE NUMBER **HYFWY0** 

PAGE

Tel: +1.305.925.2600 • Fax: +1.305.507.7191 • www.KLXaerospace.com Remit to Address: 88289 Expedite Way, Chicago, IL 60695-0001 Wire Instructions: KLX Inc. • JPMorgan Chase Bank New York ABA: 021000021 • Account: 304639273 • SWIFT: CHASUS33 • CHIP UID: 0002

SEND TO ACCOUNTING

CANADA K6A 1K7

**<u>soup</u> <u>79</u> 109** 

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON

# 

### SHIP TO:

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7

RDER NO.		DATE	SHIP VIA			TERMS	8	HIPPING TERMS
27404	\	02/17/15	FEDX INTL F	1 COLL		NET 45	I	FOB-MIAMI
	QUANTITY ORDERED	PART NUMBER AND DESCRIPTION		PRICE	UNIT	BACK ORDER	SHIPPED	AMOUNT
1	600	MS20426AD3-8 Description RIVET	, SOLID	0.030	EA	0	600	18.00/
		MFR: AHG ATELIERS CTRL#: 2014I20175 LOT#: 289909P001F0 LOT QTY: 600 Country of Origin	)01	IN				
2	/50	NAS6604D16  Description BOLT  ECCN :9A991		0.970	EA	0	50	48.50
		MFR: CALIFORNIA SO CTRL#: 2013B09779 LOT#: 325570 LOT QTY: 50 Country of Origin		'S			5o.	
3	300	MS21059L3 Description LOCKNU	***	0.390 TWO LUG	EA	o	300	117.00
		ECCN :9A991 MFR: PAOLO ASTORI CTRL#: 2014E10910 LOT#: 57802			4			
		LOT QTY: 300 Country of Origin	USA					
5	50	MS27039-4-22 Description SCREW ECCN :9A991		0.600	EA	0	50	30.00
		MFR: LFC INDUSTRING CTRL#: 2012H03938	≅S			2	)(5-1	5-M
								#

ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE.

SHIPPED FROM: 10000 NW 15 TERRACE, MIAMI, FL 33172

MATERIAL CERTIFICATION: KLX INC. ("KLX AEROSPACE SOLUTIONS") WARRANTS THAT THE ITEMS SUBJECT OF THIS INVOICE WILL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP AND, AS SET FORTH ON THE MATERIAL CERTIFICATION FORM ACCOMPANYING THE ITEMS SUBJECT OF THIS INVOICE, ARE IN CONFORMITY WITH ALL CURRENT GOVERNMENTAL REQUIREMENTS AND THE SPECIFICATIONS OF THE RESPECTIVE MANUFACTURERS. KLX AEROSPACE SOLUTIONS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. THE LIABILITY OF KLX AEROSPACE SOLUTIONS IS EXPRESSLY LIMITED EXCLUSIVELY TO REPLACEMENT BECAUSE OF A DEFECT IN MATERIAL OR WORKMANSHIP SUCH REPLACEMENT SHALL OF ANY ITEM WHICH IS REJECTED CONSTITUTE SATISFACTION OF ALL LIABILITY KLX AEROSPACE SOLUTIONS MAY HAVE IN CONNECTION WITH SUCH ITEM, WHETHER LIABILITY IS BASED UPON CONTRACT RIGHTS, NEGLIGENCE, OR OTHERWISE, AND IN NO EVENT SHALL KLX AEROSPACE SOLUTIONS BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENT DAMAGES. FURTHER, KLX AEROSPACE SOLUTIONS MUST BE NOTIFIED OF A REJECTION OF AN ITEM WITHIN 30 DAYS AFTER RECEIPT BY THE CUSTOMER.



PACKING SLIP

Vive President of Quality

BY RECEIVING DELIVERY OF THE ITEMS COVERED BY THIS PACKING SLIP, BUYER AGREES TO THE TERMS AND CONDITIONS OF SALE AT:

http://www.KLXaerospace.com/conditions-sale/



Tel: +1.305.925.2600 • Fax: +1.305.507.7191 • www.KLXaerospace.com Remit to Address: 88289 Expedite Way, Chicago, IL 60695-0001 ABA: 021000021 • Account: 304639273 • SWIFT: CHASUS33 • CHIP UID: 0002 SEND TO ACCOUNTING

**HYFWY0** 

**INVOICE NUMBER** 

PAGE 2

**5040 19** 09

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7

### SHIP TO:

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7

ORDER NO		DATE	SHIP VIA			TERMS		SHIPPING TERMS	<b>;</b>
27404	.488	02/17/15	FEDX INTL E	1 COLL		NET 45		FOB-MIAM	
			LEDY THIP P				ALUBRED.		- · · · · · · · · · · · · · · · · · · ·
ITEM NO.	QUANTITY ORDERED	PART NUMBER AND DESCRIPTION		PRICE	UNIT	BACK ORDER	SHIPPED	AMOUNI	
ITEM	QUANTITY ORDERED	PART NUMBER AND DESCRIPTION  LOT QTY: 50 Country of Origin MS27039-4-21 Description SCREW ECCN: 9A991 MFR: MAC FASTENER CTRL#: 2013H22238 LOT#: 65220 LOT QTY: 50 Country of Origin  These commodities exported from the with the Export Ac Diversion contrary	USA USA , technology United State	O.600  or softwee in accon Regulat	EA ere	were	SHIPPED 50	AMOUNT	****COM
		MATERIAL TO BE RE							

ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE.

SHIPPED FROM: 10000 NW 15 TERRACE, MIAMI, FL 33172

MATERIAL CERTIFICATION: KLX INC. ("KLX AEROSPACE SOLUTIONS") WARRANTS THAT THE ITEMS SUBJECT OF THIS INVOICE WILL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP AND, AS SET FORTH ON THE MATERIAL CERTIFICATION FORM ACCOMPANYING THE ITEMS SUBJECT OF THIS INVOICE, ARE IN CONFORMITY WITH ALL CURRENT GOVERNMENTAL REQUIREMENTS AND THE SPECIFICATIONS OF THE RESPECTIVE MANUFACTURERS. KLX AEROSPACE SOLUTIONS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. THE LIABILITY OF KLX AEROSPACE SOLUTIONS IS EXPRESSLY LIMITED EXCLUSIVELY TO REPLACEMENT BECAUSE OF A DEFECT IN MATERIAL OR WORKMANSHIP SUCH REPLACEMENT SHALL OF ANY ITEM WHICH IS REJECTED CONSTITUTE SATISFACTION OF ALL LIABILITY KLX AEROSPACE SOLUTIONS MAY HAVE IN CONNECTION WITH SUCH ITEM, WHETHER LIABILITY IS BASED UPON CONTRACT RIGHTS, NEGLIGENCE, OR OTHERWISE, AND IN NO EVENT SHALL KLX SEROSPACE SOLUTIONS BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENT DAMAGES. FURTHER, KLX AEROSPACE SOLUTIONS MUST BE NOTIFIED OF A REJECTION OF AN JTEM WITHIN 30 DAYS AFTER RECEIPT BY THE CUSTOMER.

PACKING SLIP

View President of Quality BY RECEIVING DELIVERY OF THE ITEMS COVERED BY THIS PACKING SLIP, BUYER AGREES TO THE TERMS AND CONDITIONS OF SALE AT:

http://www.KLXaerospace.com/conditions-sale/



Tel: +1.305.925.2600 • Fax: +1.305.507.7191 • www.KLXaerospace.com Remit to Address: 88289 Expedite Way, Chicago, IL 60695-0001
Wire Instructions: KLX Inc. • JPMorgan Chase Bank New York
ABA: 021000021 • Account: 304639273 • SWIFT: CHASUS33 • CHIP UID: 0002

**HYFWY0** 

INVOICE NUMBER

PAGE 3

SEND TO ACCOUNTING

**5010 10** 109

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7

# SHIP TO:

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7

ORDER NO.		DATE	SHIP VIA			TERMS		SHIPPING TERMS
27404	<u> </u>	02/17/1	.5 FEDX INTL	P1 COLL		NET 45	]	FOB-MIAMI
ITEM NO.	QUANTITY ORDERED	PART NUMBER AND DESCRIPTION	ON .	PRICE	UNIT	BACK ORDER	SHIPPED	AMOUNT
INVOI	*** SHIP # 1=CTN # 2=CTN	ACCT# 15179324-0  HYFWY0	73690308				SUBTOTAL HANDLING DISC/ALL INCM FRT FREIGHT TOTAL	0.00
pxu	9JBNT8	SHIPPED ON 02/17	/15					#   
		MATERIAL TO BE	E RETURNED MUST H	AVE PRIOR A	UTHO	RIZATION BY KL	X INC.	

ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE.

SHIPPED FROM: 10000 NW 15 TERRACE, MIAMI, FL 33172

MATERIAL CERTIFICATION: KLX INC. ("KLX AEROSPACE SOLUTIONS") WARRANTS THAT THE ITEMS SUBJECT OF THIS INVOICE WILL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP AND, AS SET FORTH ON THE MATERIAL CERTIFICATION FORM ACCOMPANYING THE ITEMS SUBJECT OF THIS INVOICE, ARE IN CONFORMITY WITH ALL CURRENT GOVERNMENTAL REQUIREMENTS AND THE SPECIFICATIONS OF THE RESPECTIVE MANUFACTURERS. KLX AEROSPACE SOLUTIONS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OF HIMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. THE LIABILITY OF KLX AEROSPACE SOLUTIONS IS EXPRESSLY LIMITED EXCLUSIVELY TO REPLACEMENT BECAUSE OF A DEFECT IN MATERIAL OR WORKMANSHIP SUCH REPLACEMENT SHALL OF ANY ITEM WHICH IS REJECTED CONSTITUTE SATISFACTION OF ALL LIABILITY KLX AEROSPACE SOLUTIONS MAY HAVE IN CONNECTION WITH SUCH ITEM, WHETHER LIABILITY IS BASED UPPON CONTRACT RIGHTS, NEGLIGENCE, OR OTHERWISE, AND IN NO EVENT SHALL KASPACE SOLUTIONS BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENT DAMAGES. FURTHER, KLX AEROSPACE SOLUTIONS MUST BE NOTIFIED OF A REJECTION OF AN ITEM WITHIN 30 DAYS AFTER RECEIPT BY THE CUSTOMER.

**PACKING SLIP** 

BY RECEIVING DELIVERY OF THE ITEMS COVERED BY THIS PACKING SLIP, BUYER AGREES TO THE TERMS AND CONDITIONS OF SALE AT:

http://www.KLXaerospace.com/conditions-sale/

Vice President of Quality



Tel: +1.305.925.2600 • Fax: +1.305.507.7191 • www.KLXaerospace.com
Remit to Address: 88289 Expedite Way, Chicago, IL 60695-0001
Wire Instructions: KLX Inc. • JPMorgan Chase Bank New York
ABA: 021000021 • Account: 304639273 • SWIFT: CHASUS33 • CHIP UID: 0002
SEND TO ACCOUNTING

CONSOLIDATION

CONSOLIDATION

PAGE

1B8L5N

**SOLD TO:**- 002409

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7

### SHIP TO:

DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY, ON CANADA K6A 1K7

ORDER NO	).	DATE	SHIP VIA			TERMS		SHII	PPING TERMS	
See B	elow	02/17/2015	FEDX INTL	P1 COLL		NET 45		FO	B-MIAMI	
TEM NO.	QUANTITY ORDERED	PART NUMBER AND DESCRIPTION		PRICE	UNIT	BACK ORDER	SHIPPED	•	AMOUNT	
		INVOICE# CUST P/OFED. TAX# 47-163-9								
1		HYFWXZ 27458 HYFWY0 27404				;				
	***CONS(	DIJIDATION SUMMARY PA	GE ONLY		.l					
pxu		SHIPPED ON 02/17/2	2015							
									the property of	
		•								
	:									

ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE.



Page: 1 of 1

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.KLXaerospace.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

# **Material Certification**

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to KLX Aerospace Solutions.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: 2

.NE# OUANTITY U/M PART-NUMBER

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MFR DATE EXP DATE

50 EA MS27039-4-21

MAC FASTENER

ORFT4

Jason Lewis

Senior Director, Global Quality

Tnv # 02/17/15

# MAC FASTENERS, INC. 1110 ENTERPRISE OTTAWA, KANSAS 66067

# CERTIFICATE OF CONFORMANCE AND **MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0KYE34

PART NUMBER: MS27039-4-21

REV: 3

LOT NUMBER: 65220

MANUFACTURED QUANTITY: 18,000

MILL HEAT NUMBER: 8172011

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

# MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon reque

DATE: 08/20/13

QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Regestered Company- SAI GLOBAL - 0058029

# MAC FASTENERS, INC. 1110 EAST ENTERPRISE OTTAWA, KS 66067

# **CHEMICAL & PHYSICAL TEST REPORT**

CUSTOMER B/E AEROSPACE	PO N	OKYE34	MFG QUANTITY 18,000	DATE 08/20/13
PART NUMBER	REV	LOT NO	PROCUREMENT	SPEC
MS27039-4-21	3	65220	NA	ASM7839

MATERIA	TYPE 8	3740		1	IAL SPE				AT NUMBE 8172011		SUPPL	JER JOHNST	OWN
C .42	.26	Mn .88	.007	.013	.08	Ni .42	Cr .48	Mo .21	.002	В	Fe	.031	Ti
	Co	N .0062	Bì	Pb	Mg	Zn		Nb	Sn .005			Other	

# **MECHANICAL TEST RESULTS - TESTING PER NASM1312**

	ENSILE STRENGTH OUNDS
5,580	
5,600	:
5,600	!
5,600	
5,560	
5,580	
5,600	
5,580	
MIN, REQ.	4,550

	SHEAR STRENGTH DUNDS / PSI
8,260	
8,200	
8,260	
8,240	
8,200	
8,200	
8,220	
8,240	i
MIN. REQ.	7,360

	HARDNESS						
ROCKWELL "C" SCALE							
REQ.	26 - 32 HRC						
SAMPLE SIZE	8						
AC	TUAL RESULTS						
	30 - 32 HRC						
	•						

Discontinuities	ত	Carb/Decarb	<u> </u>
Grain Flow	V	Microstructure	
Grain Size	V	Apppearance	Ø

# Magnetic Particle Inspection per ASTM E1444 Liquid Penetrant Inspection per ASTM E1417 Recess Torque Test Head Marking

# **TEST CERTIFICATION**

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION

FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE RE-PRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC. Quality Assurance Representative

AS9100C REGISTERED SAI GLOBAL - 0058029

# MAC FASTENERS, INC. 1110 ENTERPRISE OTTAWA, KANSAS 66067

# HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE:

08/20/13

0KYE34 PO NUMBER:

MANUFACTURED QUANTITY: 18,000

PROCESSOR:

**BODYCOTE MCLEAN - NADCAP ID 4464** 

LOT NUMBER: 65220 MATERIAL:

**TYPE 8740** 

PART NUMBER:

MS27039-4-21

**REVISION: 3** 

REQUIRED HARDNESS:

26 - 32 HRC

SAMPLE SIZE:

HARDNESS:

30 - 32 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

Notes:

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.

QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Regestered Company - SAI GLOBAL - 0058029



# Johnstown Wire Technologies

124 Laurel Ave, Johnstown, PA 15906

Phone: 814-532-5680 Fax: 814-532-5684 TEST REPORT
WORK ORDER LOT NUMBER

675805

LOT NUMBER
K-8172011
SALES ORDER / RLS

SALES ORDER / RLS 001586 / 3

SOLD TO

Mac Fasteners, Inc. C/O TD Logistics Inc. 14505 W 100th Street Lenexa, KS 66215 USA



CUSTOMER P.O. <b>50516</b>	_	USTOMER 740246				QUA <b>24,552</b>	NTITY		E LADING	–			MENT DA
SPECIFICATION AMS2301; AMS Regulation Sup Rod Spherodize Size: .2465 +.0	6322; A plemen e Annea	MS-S-60 It Silico Iled In Pi	n Killed	Fine G	irain Ai	rcraft Qu	ality/C						
CERTIFICATION RI	EQUIREM	ENTS											
					CI	nemical							
C .42	Mn . 88	.007	.0:	S 13	Si .26	A1 .031	_	11 2	Cr .48	Mo .21	Cu .08	-	.002
Cb .000 ???	T1 ????	N .0062	.00	Sn 05									
					P	nysical		···					
AMS 2301 0000	J1 58	J10 44	J11 41	J12 39	J2 58	J3 56	J5 55	J4 56	J6 54	J7 52	J8 49	J9 47	
MacroClean :	E-381												
					Med	chanical							
<u>TEST</u> Tensile Str RA Per Cent Decarb FFD Surface def. de <sub>l</sub>	oth		UNITS Lbs/Sq Percen Inches inches	it				HIGH 39000 74.7 .000		84000 72.5 .000			73.3 .000 .000
					Rod / N	elt Sour	сө						
Rod Source Republic			t Sour ublic	ce		Country USA	of O	rigin	Naf Yes				
					End of C	ertification							

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

Daniel J. Mallil Director of Quality Assurance

CERTIFICATE OF TESTS

1807 HANY 28TH NO. THOWE: 330-198-8500 REPUBLIC STEEL LONALIF. OH 44055 FAT | 330-438-5695

2/27/2013

6:32:00 AM PAGE 1 OF 2

PURCHASE ORD: 83626

PART NUMBER: FXT40AA-,375 ORDER NUMBER: 1539859 - 01

HEAT:

8172011

PURCHASE ORDER DATE:

ACCOUNT NUMBER:

12/21/2012 5672-1920-01

SCHEDULE:

9690-92

REVISION:

1

---- CHARGE ADDRESS COMMUNICATIONS CONTROL CON

JOHNSTOWN WIRE TECHNOLOGIES 124 LAUREL AVE

JOHNSTOWN, PA 15906

JOHNSTOWN WIRE TECHNOLOGIES

EDWARD ZAPOLA 124 LAUREL AVB

TRUCK STPO 9 ROD DOCK JOHNSTOWN, PA 15904

----- MATERIAL DESCRIPTION

HOT ROLLED STREL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 EXC PARA 10.3 AMS 6322N BXC HARD JOHNSTOWN WIRE SPEC RN-005 REVISION DTD 12/31/00 BXC SURFACE DEFECTS JOHNSTOWN WIRE SPEC PART NO. FXT40AA REVISION DTD 12/31/00 MIL S 5049A & AMD 1 COND B-1 EXC MARK 6 UT WAIVED EF-AISI-8740-H FINE GRAIN VACUUM DEGASSED AIRCRAFT QUALITY FIXED PRACTICE QUALITY RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS

SIZE: RDS .3750 DIAM X COIL

RDS 9.5250MM DIAM X COIL

•			LADLE CHE	mistry 🛊			
C	MIN	P	S	SI	CU	NI	CR
0.42	0.88	0.007	0.013	0.26	0.08	0.42	0.45
<b>V</b>	MO	SN	AL .	В .	CB	N ·	
0.002	0.21	0.005	0.031	0.0000	0.000	0.0062	
			CALCULATED	TESTS			

REDUCTION RATIO 1,177.6 TO 1

AUSTENITIC GRAIN SIZE 5 OR FINER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM

----- Semi - Finished Results -----

JOMINY HARDNESS TEST

SAE J406/ASTM A255

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 22 24 26 28 30 32 58 58 56 56 55 54 52 49 47 44 41 39 38 37 36 35 33 33 32 31 31 30 30 29

MACRO ETCH TEST

ASTM B381/MIL STD 430

ETCHANT: HCL TEMPERATURE: 170

S R

AVG

MAGNETIC PARTICLE TEST AMS 2301 AMS2304 AMS2300 IND AVG IND AVG

FREQ FREO SEV SEV

0 0

DECARBURIZATION TEST SAE J419/ASTM BI077/JIS G0558 ETCHANT = NITAL MAGNIFICATION - 100X

COMPLETE

TOTAL DEPTH

PCF 2392

SPIKE INCHES 0.002

INCHES

INCHES

G. KRUTH

0.002

DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES

T Ki



CERTIFICATE OF TESTS

1807 BAST TRIN RT. #HOW#: 390-439-5580

EGEATE, OH 44013 PAX: 330-43B-\$495

REPUBLIC STEEL

2/27/2013 6:32:00 AM PAGE 2 OF 2

PURCHASE ORD: 83626

PART NUMBER: FXT40AA-.375 ORDER NUMBER: 1539859 - 01

HEAT:

8172011

PURCHASE ORDER DATE:

ACCOUNT NUMBER:

SCHEDULE:

5672-1920-01 9690-92

12/21/2012

REVISION:

CAPABLE OF SEAM DEPTH 1% MAX DIAMETER NOT LESS THAN .005 MAX

NOTES ----CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019, LBL10158, LBL10114, AND ASTM E1085, LBL10184, LBL10188.

REPUBLIC STEEL HEREBY CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN

NOTES (CONTINUED) ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS HEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

CERTIFICATE OF TESTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.

ALL TESTING HAS BEEN PERFORMED USING THE CURRENT REVISION OF THE TESTING SPECIFICATIONS.

RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FED STATUTES TITLE 18 CHAPTER 47.

THE MATERIAL WAS NOT EXPOSED TO MERCURY OR ANY METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION.

NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED.

MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A

MELT METHOD: EF BLOON RED. RATIO: 1177.6

------ END OF DATA ------ CC ----- END OF DATA -----

WITH SHIPMENT 1 COPY PRINTED AT SHIPPING ARKA FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA

FILE

1 COPY

1-814-532-5684

G. KRUTH DIRECTOR QUALITY ASSURANCE BY DEBORAH STOKES

MT Kirts

# DE TRAY Plating Works

Specialized Electro-Plating and Polishing
Nickel Passivate
Copper Bright Dip
Decorative Chrome Strip Copper
Satin Chrome Descale
Zinc

Cadmium

10405 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052 Phone (816) 252-8411 Fax (816) 252-8527 • E-mail: DeTrayPlating@Aol.com

August 15, 2013

Mac Fasteners 1110 East Enterprise Street Ottawa, Kansas 66067

Subject: Certification

This is to certify that the following parts have been cadmium plate per QQ-P-416/AMS-QQ-P-416/NAS4160/AMS2400, Type II, Class 2. Please reference our Invoice#172173 dated 8/15/2013 for:

Lot#- 65220

P.N.- MS27039-4-21

James T. Pierson, Vice-President

DE YRAY PLATING WORKS

Please Visit our Web Site: DeTrayPlating.com



Page: 1 of 1

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www.KLXaerospace.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: 27404

LNE# QUANTITY U/M PART-NUMBER

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MFR DATE EXP DATE

600 EA MS20426AD3-8

289909P001F00

AHG ATELIERS HAUTE-G F0095

Jason Lewis

Senior Director, Global Quality

Inv # 02/17/1



Page: 1 of 1

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR

www.KLXaerospace.com

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: 27404

INE# QUANTITY U/M PART-NUMBER

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MFR DATE EXP DATE

50 EA MS27039-4-22

511

LFC INDUSTRIE

62384

Jason Lewis

Senior Director, Global Quality

Inv # 02/17/15



manufacturer of precision aerospace fasteners

1221 Corporate Dr. W • P. O. Box 5982 Arlington, Texas 76006 (817) 640-1322

# SHIPPING REPORT

51185

PRODUCTION ORDER # 51185 COUNTRY OF ORIGIN: USA



B/E AEROSPACE HONEYWELL CONSUMABLES SOL 9835 NW 14TH STREET MIAMI. FL 33172

SHIPPING METHOD	FELLY FRT
PRE-PAID:	COLLECT
ORDER NO.	0EJV36
PART NO.	MS 27039-4-22 TTEM# 1
REVISION	3
QTY. DUE	25000
SHIP TOL.	+0-5%
DATE DUE	07-04-2012

# **COMMENTS**



DFAR 252-225-7009

RETURN OF ANY MERCHANDISE LISTED HEREON WILL NOT BE ACCEPTED WITHOUT PRIOR AUTHORIZATION

# **CERTIFICATE OF CONFORMANCE**

THE MATERIALS, PROCESSES AND PARTS FUR-NISHED WERE PRODUCED IN ACCORDANCE WITH APPLICABLE SPECIFICATION REQUIREMENTS, AND TEST REPORTS INDICATING CONFORMANCE ARE ON FILE SUBJECT TO EXAMINATION, OUR Q.C. INSPECTION SYSTEM CONFORMS TO ISO 9,001.

1aul

EECN: EAR99.SCHEDULE B #7318.1

QTY. SHIPPED: LBS. PER "M": CONTAINERS: GROSS WEIGHT: 630,21 PCS. USED TO **ESTABLISH WT** TARE WEIGHT: NET WEIGHT: SHIPPING DATE CLERK: CONSIGNEE DATE SIGNATURE:

LFC INDUSTRIES, DIV. OF RKR TECHNOLOGIES LTD.
1221 CORPORATE DR. W., ARLINGTON, TX 76006
(817) 640-1322 FAX (817) 652-1566

LFC IND. CAGE CODE # 62384, CERTIFICATION - FASTENERS IN THIS LOT WERE MANUFACTURED, PROCESSED AND INSPECTED IN ONE RUN PER APPLICABLE DRAWING, PROCUREMENT SPECIFICATION, ISO9001:2008, AND AS9100B.

_					<u> </u>			<del></del>			
<u> </u>	PART #		REVISION	LOT#			CUSTO	)MER		PO #	
	MS27039-4-2	2	3	51185		B/	E AERO	OSPACE	] [	0EJV36	
	ANTITY PROC			N HEAT TR	EAT S	PECIFICA	TION		DESCRI	PTION	·
]	25000	NASM7839	REV-1	J L	AMS-2	759/1		S	CREW, P	AN HEAD	
<u> </u>	FINISH TYP	E FI	NISH SPECIFI			BAKE			GD G G G	n n a n a a	
<u> </u>	TYII CL2		AMS-QQ-P-4	16C		N/A			CROSS	RECESS	
<u> </u>	THREAD SIZE	THREA	D SPECIFICA	TION		HAF	RDNES	S REQUIRED	HARDNE	SS ACTUAL A	AVERAGE
	1/4-28 UNF3A		H28/2				RC	26-32		RC 31	
ND	T SAMPLE SIZE	NDT SPEC		NDT ACCEP	T N	DT REJEC	CT	LOCKIN		ENT SPECIF	ICATION
	315	ASTM E1444		315	╜╙	0				N/A	
M/	AGNETIC PERMEA		LE SIZE PEI		ACCE	PT PER		ILITY REJECT	1 1		
<u> </u>		I/A .		N/A	· · · · ·			N/A			
RE	CESS TORQ SAMP	LE SIZE MIN	NIMUM TORO	REQUIRED	TOR	Q END L	DAD	TORQ ACCEP	T TO	RQ REJECT	٦
	N/A		, N/A			N/A	<u> </u>	N/A		N/A	<u> </u>
l M			ITION ON CER PECIFICATION				C1	PPLIER			
'''	10150310		5322N	874		<u> </u>		RETECH			
	C Mn	P 5		Ni Ni	Cr	 Mo		Cu V			
	8 .85	.008 .00		.42	.53	.22		08			
		Al C	o Pb	Fe	Sn	Zn		N Mg			
TEN	ISILE SAMPLE S	IZE TENSIL	E STRENGTH	REQUIRED	DOI	BLE SHE	AR SAM	IPLE SIZE D. S	SHEAR ST	RENGTH RE	OUIRED
	20		4550#	i.DQ GIACO			20			7360#	
T1	6100	6000	T23		SI	8900		S12 8850	S23		7
T2		13 5950	T24		S1 S2	8850	===	S12 8900	S24		J ]
₩ T3		14 6050	T25			8950	==		=		<u>]</u>
T4		15 6100	¬ : ==		S3	9000			S25		j 1
T5		16 6050	T26		S4			815 8950	S26		j 1
T6		17 6000	T27		S5	8950		S16 9000	S27	· · · · · · · · · · · · · · · · · · ·	J 1
T7		18 5950	T28		S6	8850		8950	S28	*****	j
T8		19 6050	T29		<b>S</b> 7	8900		S18 9000	S29 [		j
			☐ T30         ☐ T30        ☐ T30        ☐ T30         ☐ T30         ☐ T30         ☐ T30         ☐ T30		S8	8850	=	8950	S30 [		ļ
Т9		20 6100	T31		S9	8950	:	820 8850	S31 [		ļ
T10		`21	T32		S10	9000	:	S21	S32 [		]
T11	5900 T	22			S11	8950		S22			
FAT	IGUE SAMPLE S	IZE FATIGU	E MAX LOAD	FATIGUE N	MIN LO	DAD	мет	ALLURGICAL S	AMPLE S	IZE	20
<u> </u>	N/A	<u> </u>	<del></del>				MIC	RO STRUCTU	RE	ACCEP	T
1	YCLES	F1 LO	CATION OF F	AILURE			]  <sub>MA</sub>	CRO STRUCTU	RE	ACCE	Ϋ́
F2 C	YCLES	F2 LO	CATION OF F	AILURE			DEC	ARBURIZATION		NONE	
F3 C	YCLES	F3 LO	CATION OF F	AILURE			7!	RBURIZATION		NONE	
F4 C	YCLES	F4 LO	CATION OF F	AILURE			18	EMPERED MAR			ONE
F5 C	YCLES	F5 LO	CATION OF F	AILURE			11	IN FLOW		ACCEPT	
F6 C	YCLES	F6 LO	CATION OF F	AILURE			11	CONTINUITIES		ACCEPT	
F7 C	YCLES	F7 LO	CATION OF F	AILURE			المالية	CHIMUITES		ACCEPT	
	YCLES		CATION OF F				ـــا[	DEVIAT		VER NOTES	3
	IGUE ACCEPT	0		E REJECT		0	┧└─		N/A		
							╣┌──	CERTIFICAT		ENDMENT N	OTES
		TOV SPECIAL		UTHORIZED	SIGNA	TURE	AM.	ENDMENT DAT	N/A	•——	
7/31	/2012 DATA EN	TRY SPECIAL	المياس القا	line (	nu	ull			] ·		



**PAULO** COMPANY

**HEAT TREATERS** PRODUCTS AND FINISHERS OF METAL

**4827 CHELSEA AVENUE** KANSAS CITY, MO 64130 TEL: (816)861-7500

FAX: (816)924-7300

**CERTIFIED** INSPECTION REPORT

SHIP TO CODE:

PAULO #: 1082674-02

DATE REC'D: 02/29/2012

DATE: 03/12/2012

L F C INDUSTRIES

1221 CORPORATE DRIVE WEST

P O BOX 5982

T ARLINGTON, TX 76006-5982

PART DESC: CROSS SECTION .2482 X 1.438L

PART NAME: SCREW, PAN HEAD

PART #: MS27039-4-22

QUANTITY: 28000 PCS

MATERIAL: 8740

**CUSTOMER PO: 51185** 

**CUSTOMER DRAY:** 

**CUSTOMER JOB:** 

LOT #:

OTHER #:

Requirements:

Process per SAE spec AMS 2759/1 rev E,

Final core hardness 29-32 HRC

**INSPECTION RESULTS:** 

**CORE HARDNESS** 

Count: 13

Range: 29 -32 HRC

Certified Furnace # 501 Cycle/Load # 6 High heat temp: 1550±25° F Soak time: 60min

Quench: Oil

Temper furnace: 531 Temper temp/time: 1080±15° F/ 2hrs

\*Paulo is responsible for hardness testing only, customer responsible for all other testing. Paulo is not responsible for tensile testing\*

I CERTIFY THAT APPLICABLE MATERIAL PROCESSES HAVE BEEN PERFORMED IN ACCORDANCE WITH THE SPECIFICATION SHOWN ABOVE. I HAVE INSPECTED THE WORK AND THE SAMPLING AND RESULTS ARE AS INDICATED.

Approved By

Inspector Signature

CERTIFICATION REVIEWED ACCEPT LFC



SOLD TO

LFC Industries **1221 Corporate Drive West** Arlington, TX 76011 ÚSA

# CERTIFICATION

**WORK ORDER** 088593

HEAT NO. 10150310 SALES ORDER / RLS 842876 / 1 ISO 9001-2000 REGISTERED



CERT# 911.01

14631	CUSTOME	RPART		14,679		RRIERS 11	LADING NO <b>00094650</b>	SHIPMENT DATI 01/16/2012
SPECIFICATION L15 A-8740, AQ, SKFG Size:0.247/0.248	, CHQ WIRE	, SEAM & DE	ECARB FR H, AMS63:	REE, SAIP 2 22N, MIL-S	Zinc Pho -6049A, A	sphate, Lim AMEND.1, A	e & Stearate C MS-S-6049-A	oating,
CERTIFICATION REQU	IREMENTS							
			Chemi	cal Proper	ties			
	Si Mn	<del></del>	S	Cu	Ni	Cr	Mo ·	
.38 .:	24 .85	.008	.008	.08	. 42	. 53	. 22	
			Physic	cal Propert	ies			
6 <b>J</b> ! —				2-R1-C2	GOOD	F&S=0	Charter	
	5=52 J8 igin		)=42 S2	?-R1-C2	GOOD			
Country of Or	5=52 J8 igin		)=42 S2		GOOD			
6 Ji Country of Or: USA - DFAR Con  EST Tensile Strength Decarb (Total)	5=52 J8 igin	UNITS KSI In	)=42 S2	?-R1-C2	GOOD rties	F6S=0	Charter	Results 85.6 0.00
Country of Or:  USA - DFAR Con  TEST  Tensile Strength Decarb (Total)  Yield Strength	5=52 J8 igin	UNITS KSI In KSI	)=42 S2	?-R1-C2	GOOD rties	F6S=0	Charter	Results 85.6 0.00 72.8
Country of Or	5=52 J8 igin mpliant	UNITS KSI In	)=42 S2	?-R1-C2	rties ERTIF	F6S=0	Charter	Results 85.6 0.00

Merchandise covered by this invoice is warranted to be free from defects in workmanship or material but not for any specific length of time, type or measure of service. No claim for allowance will be recognized unless presented in writing within 10 days time after receipt of material. Our maximum liability for any claim predicated upon defective merchandise is limited to replacement of it, or to repayment of it, or to repayment of the purchase price thereof, as we elect. Material cut to specific length or size cannot be returned for credit and request for cancellation of such orders will not be considered if manufacture has been commenced. Buyer, by acceptance of the merchandise covered by this invoice, agrees to the foregoing terms and conditions and those set forth on the reverse hereof. The recording of false, fictious or fraudulent statements or entries on this document may be punished as a felony under Federal statutes including Federal law, the 18, Chapter 47.\*

REPRODUCTION OF THIS CERTIFICATION IS NOT ALLOWED UNLESS IN FULL.

Wire Tech, inc. metallurgical laboratory is accredited in the following test: chemical analysis per ASTM E 415, mechanical testing per ASTM A 370, Rockwell hardness per ASTM E 18, metallographic mount preparation per ASTM E 3, decarburization depth per ASTM E 1077, IF1 140, inclusion rating per ASTM E 45, decarburization performed as per IFI 140.

The reported Chemical and Physical Properties are Melt Source results. Transcribed from mill certificates. HRB(W) are hardness results performed with a 1/16° carbide ball. Unless otherwise specified, HRB and HRC results are conversions from ASTM AS70 tables 1 and 2. \*Test result not covered by our current A2LA accreditation. Tests which have been undertaken by a subcontractor laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, inc. A2LA accreditation.

DFAR Material per Clauses 252.225-7014 ALT. 1, 252.225-7009, & 225.003(9)

"LATEST REVISIONS OF ASTM"

Material is free of mercury, radium, or alpha contamination.



A Division of

EMAIL

1658 Cold Springs Road

Saukville, Wisconsin 53080

(262) 268-2400

1-800-437-8789

FAX (262) 268-2570

Charter Manufacturing Company, Inc.

# **CHARTER STEEL TEST REPORT Reverse Has Text And Codes**

Wiretech Incorporated **6440 East Canning Street** Attn: Andre Stephan Los Angeles, CA-90040

Cust P.O.	6676-12
Customer Part #	8740C1A090-C-WIRE
Charter Sales Order	70027600
Heat #	10150310
Ship Lot#	4102607
Grade	8740 R SK FG AQ 3/8
Process	DFSAR
Finish Size	0.360

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed below and on the reverse side, and that it satisfies these requirements.

Lab Code: 7388					Test	Results o	Heat Lot	# 1015031	10		
CHEM %Wt	C .38	MN .85	P .008	S .008	SI .24	NI .42	CR .53	MO .22	.08	SN .006	V .001
	AL .026	N .0060	B .0001	TI .002	NB .002						
JOMINY(HRC)	JOM01 55	JOM02 55	JOM03 55	JOM04 54	JOM05 52	JOM06 49	JOM07 47	JOM08 45	JOM09 44	JOM10 42	JOM12 39
	JOM14 37	JOM16 35	JOM18 34	JOM20 33	JOM24 31	JOM28 29	JOM32 28				

JOMINY SAMPLE TYPE ENGLISH = C
MACRO ETCH SURFACE = 1 MACRO ETCH RANDOM = 1 MACRO ETCH CENTER = 1
AMS 2301 FREQUENCY AVERAGE = .00 AMS 2301 FREQUENCY INDIVIDUAL = .00
AMS 2301 SEVERITY INDIVIDUAL = .00 CHEM. DEVIATION EXT.-GREEN =

**REDUCTION RATIO = 274:1** 

Test Results of Rolling Lot# 1048427

Test Results of Processing Lot# 4099343,4102607 Min Value Max Value Mea # of Tests Mean Value

**TENSILE** 3.0 78.2 96.6 84.7 **REDUCTION OF AREA** 3 64 65 64

NUM DECARB = 5 FREE FERRITE DECARB = .000 FREE FERR & PARTIAL CP SPHERO % LAB = 0358-02 NUM SPHERO = 5 SPHERODIZATION = 89.0 FREE FERR & PARTIAL DECARB = .002

Specifications:

Manufactured per Charter Steel Quality Manual Rev 9,08-01-09 Meets customer specifications with any applicable Charter Steel exceptions for the following customer documents: Customer Document = AMS6322N/AMS2301K/COP3010M/BS2S147:1976 CHEM ONLY . Revision =

**Additional Comments:** 

Rem: Load1, Fax0, Mail0

Charter Steel Saukville, WI, USA

Page 1 of 1

This MTR supersedes all previously dated MTRs for this order

**TENSILE LAB = 0358-02** 

**RA LAB = 0358-02** 

Janice Barnard Manager of Quality Assurance 11/14/2011

# LFC INDUSTRIES DIV. OF RKR TECHNOLOGIES LTD

1221 CORPORATE DR. W **ARLINGTON, TX 76006** 

# PLATING - PASSIVATION CERTIFICATION REPORT

LOT # 51185	CUSTOMER B/E AEROSPACE	MILL HEAT # 10150310
PART # MS27039-4-22	PO # 0EJV36	HARDNESS REQUIRED  RC 26-32
<b>QUANTITY</b> 25000	FINISH TYPE TYII CL2	FINISH SPECIFICATION AMS-QQ-P-416C
TIME AND DATE OUT OF PL.	ATE	
TIME AND DATE IN OVEN	1	·
TIME AND DATE OUT OF OV	ZEN	
THE STATED FINISH SPECIFICATION PLATING AT 375 DEGREES (F), FO	ERE PROCESSED IN ACCORDANCE WITH A HYDROGEN EMBRITTLEMENT RELIEF, I OR A MINIMUM OF TWENTY THREE HOUR IN FILE AT LFC INDUSTRIES AND ARE SUB	F REQUIRED WAS PERFORMED AFTER S UNLESS OTHERWISE SPECIFIED.
CERTIFICATION DATE 7/31/2012	•	
AUTHORIZED SIGNATURE:	Ellin Grane	SIGNATURE TITLE DATA ENTRY SPECIALIST

# LFC INDUSTRIES DIV. OF RKR TECHNOLOGIES LTD.

1221 CORPORATE DR. W.

**ARLINGTON, TX 76006** 

# NDT CERTIFICATION REPORT

CUSTOMER B/E AEROSPACE	1
PO # 0EJV36	
PART # MS27039-4-22	
QUANTITY 25000	
LOT # 51185	
MAGNETIC PARTICLE INSPECTED PER: ASTM E1444/E1444M-11	
FLOURESCENT PENETRANT INSPECTED PER:	
NDT SAMPLE SIZE 315	
NDT ACCEPT 315	
NDT REJECT 0	
5	
NDT RESULTS NO DEFECTS WERE FOUND	. wijir
ACCEPTANCE CRITERIA PER: NASM7839 REV-1	
NIDT PROCESS PERFORMED DV	
NDT PROCESS PERFORMED BY  LFC INDUSTRIES	
NIDT INCIDENTIAL TRANSPORTED LANGUE	
NDT INSPECTOR INSPECTOR LEVEL KEITH SPARKMAN	
• :	
811:04	
AUTHORIZED SIGNATURE: Cellus Gulles	
SIGNATURE TITLE DATA ENTRY SPECIALIST	
CERTIFICATION DATE 7/31/2012	:

LFC INDUSTRIES
1221 CORPORATE DR. W
ARLINGTON, TX 76006

PHONE # 817-640-1322 FAX # 817-652-1566

# NO MERCURY/CLASS 1 OZONE CONTENT CERTIFICATION

CUSTOMER	B/E AEROSPACE
PO #	0EJV36
PART #	MS27039-4-22
LOT#	51185
QUANTITY	25000

PLEASE BE ADVISED, THE ABOVE REFERENCED PARTS HAVE NOT COME INTO CONTACT WITH MERCURY/CLASS 1 OZONE DEPLETING SUBSTANCES DURING THE MANUFACTURING, TESTING, INSPECTION, OR HANDLING PROCESS. THE PRODUCT DOES NOT CONTAIN MERCURY/CLASS 1 OZONE DEPLETING SUBSTANCES TO THE BEST OF THE KNOWLEDGE OF LFC INDUSTRIES.

AUTHORIZED SIGNATURE: \_\_\_

SIGNATURE TITLE DATA ENTRY SPECIALIST

CERTIFICATION DATE 7/31/2012



Page: 1 of 1

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR

www.KLXaerospace.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

# **Material Certification**

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with a current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to KLX Aerospace Solutions.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: 27404

LNE# QUANTITY U/M PART-NUMBER

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MFR DATE EXP DATE

300 EA MS21059L3

5780

PAOLO ASTOR

A3856

Jason Lewis

Senior Director, Global Quality

Inv # 02/17/15



Via Mirabella, 9 - Maggiate Superiore 28013 Gattico (NO) - ITALY Tel. (+39) 0322 838847 Fax (+39) 0322 880198

Web: www.paoloastori.com



This is to certify that goods listed below have been inspected in our plant and are up to your orders and to the specifications of the drawings mentioned therein.

Country of origin is ITALY.

# CERTIFICATE OF CONFORMANCE

N° 4063

Date 02/05/2014 Pag. 1/5

# Purchased by:

B/E AEROSPACE INC. CONSUMABLES MANAG 10000 NW 15TH TERRACE MIAMI - FL

USA

# Shipped to:

B/E AEROSPACE INC. CONSUMABLES MANAG 9835 NW 14TH ST.

33172 MIAMI - FL US

Pos.	Part Number	Purchase Order	PO Date	Quantity	U.M.	Batch #	Cure Date Expiry Date
1	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	2405	N	57802	1
2	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	, N	57802	
3	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	1
4	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	
5	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
6	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
7	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	
8	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
9	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
10	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	
11	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	
12	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	: :
13	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	

3- APPROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS APPROVAL # 204788 Se sotto SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 F ed con fedex economy,account #018757 150 lbs sped con fedex ground, account #0331-0149-0,mark:collect;se sopra

MAA - Complies with DFARS 252.225-7014. Airbus approval # 204788 - BAE Approval # BAE/AG/3 Agusta-Westland Q500 approval # A/0047

All claims regarding the parts in subject must be reported to seller promptly. Credit or replacement of parts may be limited to those parts for which traceability has been mantained by the buyer. The seller manufacturing lot identification number and return authorization (RMA) must accompany all returns. Any discrepancy claimed by the Customer must be made in writing to seller not later than ninety (90) days after the shipping date. The liability of seller on parts found to be defective is limited to replacement or rework of such goods, at seller option, and in no case is to exceed the invoice value of such goods. Under no circumstance will seller be liable for damages or cost incurred by buyer or subsequent user beyond the invoiced value of the parts in subject.



Via Mirabella, 9 - Maggiate Superiore 28013 Gattico (NO) - ITALY Tel. (+39) 0322 838847 Fax (+39) 0322 880198

Web: www.paoloastori.com



This is to certify that goods listed below have been inspected in our plant and are up to your orders and to the specifications of the drawings mentioned therein.

Country of origin is ITALY.

# CERTIFICATE OF CONFORMANCE

N° 4063

Date 02/05/2014 Pag. 2 / 5

# Purchased by:

B/E AEROSPACE INC.CONSUMABLES MANAG 10000 NW 15TH TERRACE MIAMI - FL

IVIIAIV

USA

# Shipped to:

B/E AEROSPACE INC.CONSUMABLES MANAG 9835 NW 14TH ST.

33172 MIAMILE US

			33172 MIA		: Cure Date		
Pos.	Part Number	Purchase Order	PO Date	Quantity	U.M.	Batch #	Expiry Date
14	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	
15	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	3500	N	57802	
16	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	1
17	MS21059L3/NAS686A3(Rev. REV2)	DFPW35	16/02/2012	6000	N	57802	
18	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	
19	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
20	MS21059L3/NAS686A3(Rev. REV2)	0FPW36	16/02/2012	6000	N	57802	
21	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
22	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
23	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57802	:
24	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	1516	N	57800	
25	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
26	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	:

SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 3- APPROVAL # BAE/AG/30831/MAA AND WITH AIRBUS SAS APPROVAL # 204788 Se sotto 150 lbs sped con fedex ground, account #0331-0149-0,mark;collect;se sopra 150 lbs sped con fedex account #018757

Airbus approval # 204788 - BAE Approval # BAE/AG/30631/NA Agusta-Westland Q500 approval # A/0047 mplies with DFARS 252.225-7014.

All claims regarding the parts in subject must be reported to seller promptly. Credit or replacement of parts may be limited to those parts for which traceability has been mantained by the buyer. The seller manufacturing lot identification number and return authorization (RMA) must accompany all returns. Any discrepancy claimed by the Customer must be made in writing to seller not later than ninety (90) days after the shipping date. The liability of seller on parts found to be defective is limited to replacement or rework of such goods, at seller option, and in no case is to exceed the invoice value of such goods. Under no circumstance will seller be liable for damages or cost incurred by buyer or subsequent user beyond the invoiced value of the parts in subject.

MOD. CERCON-05



Via Mirabella, 9 - Maggiate Superiore 28013 Gattico (NO) - ITALY Tel. (+39) 0322 838847 Fax (+39) 0322 880198 Web: www.paoloastori.com



This is to certify that goods listed below have been inspected in our plant and are up to your orders and to the specifications of the drawings mentioned therein.

Country of origin is ITALY.

# CERTIFICATE OF CONFORMANCE

N° 4063

Date 02/05/2014 Pag. 3 / 5

# Purchased by:

B/E AEROSPACE INC.CONSUMABLES MANAG 10000 NW 15TH TERRACE MIAMI - FL USA

# Shipped to:

B/E AEROSPACE INC.CONSUMABLES MANAG 9835 NW 14TH ST.

33172 MIAMI - FL US

Pos.	Part Number	Purchase Order	PO Date	Quantity	U.M.	Batch #	Cure Date Expiry Date
27	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	2883	N	57800	:
28	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	1925	N	57800	i .
29	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N ·	57800	· · · · · · · · · · · · · · · · · · ·
30	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000.	N	57800	1
31	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	:
32	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	2530	N	57800	
33	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	1
34	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
35	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
36	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
37	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	:
38	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
39	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	

- SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 3- APPROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS APPROVAL # 204768. Se solto 150 lbs sped con fedex ground, account #0331-0149-0,mark:collect; se sopra 150 lbs pred con fedex ground, account #0331-0149-0,mark:collect; se sopra 150 lbs pred con fedex ground #018757

Airbus approval # 204788 - BAE Approval # BAE/AG/30631/MAA - Agusta-Westland Q500 approval # A/0047

- complies with DFARS 252.225-7014.

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Web: www.paoloastori.com



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# Country of origin is ITALY.

# CERTIFICATE OF CONFORMANCE

N° 4063

Date 02/05/2014 Pag. 4 / 5

# Purchased by:

B/E AEROSPACE INC. CONSUMABLES MANAG 10000 NW 15TH TERRACE MIAMI - FL USA

# Shipped to:

B/E AEROSPACE INC. CONSUMABLES MANAG 9835 NW 14TH ST.

33172 MIAMI - FL US

Pos.	Part Number	Purchase Order	PO Date	Quantity	U.M.	Batch #	Cure Date Expiry Date
40	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	:
41	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	:
42	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
43	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
44	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	5310	N	57800	
45	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
46	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
47	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
48	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
49	MS21059L3/NAS686A3(Rev. REV2)	OFPW35	16/02/2012	6000	N	57800	i
50	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
51	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
52	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	. N	57800	

PPROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS APPROVAL # 204788 Se sotto SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 150 lbs sped con fedex ground, account #0331-0149-0,mark:collect;se sopra 150 lbs sg an fedex economy,account #018767

Airbus approval # 204788 - BAE Approval # BAE/AG/30631/MAA- Complies with DFARS 252.225-7014. Agusta-Westland Q500 approval # A/0047

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Web: www.paoloastori.com



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Country of origin is ITALY.

# CERTIFICATE OF CONFORMANCE

N° 4063

Date 02/05/2014 Pag 5 / 5

# Purchased by:

B/E AEROSPACE INC. CONSUMABLES MANAG 10000 NW 15TH TERRACE MIAMI - FL

USA

# Shipped to:

B/E AEROSPACE INC. CONSUMABLES MANAG 9835 NW 14TH ST.

Pos.	Part Number	Purchase Order	90 Date	Quantity	U.M.	Batch #	Cure Date Expiry Date
53	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	!
54	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
55	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	·
56	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	
57	MS21059L3/NAS686A3(Rev. REV2)	0FPW35	16/02/2012	6000	N	57800	

ROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS APPROVAL # 204788 Se sotto - SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 150 lbs sped con fedex ground, account #0331-0149-0,mark:collect;se sopra 150 dex economy account #018757

Airbus approval # 204788 - BAE Approval # BAE/AG/30631/MAA - Complies with DFARS 252.225-7014. Agusta-Westland @500 approval # A/0047

All claims regarding the parts in subject must be reported to seller promptly. Credit or replacement of parts may be limited to those parts for which traceability has been mantained by the buyer. The seller manufacturing lot identification number and return authorization (RMA) must accompany all returns. Any discrepancy claimed by the Customer must be made in writing to seller not later than ninety (90) days after the shipping date. The liability of seller on parts found to be defective is limited to replacement or rework of such goods, at seller option, and in no case is to exceed the invoice value of such goods. Under no circumstance will seller be liable for damages or cost incurred by buyer or subsequent user beyond the invoiced value of the parts in subject.

COMPANY WITH QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV = EN 9100:2003 =

Cod. Fisc., Pert. I.V.A. e R.I. Novara 0011194 R.E. A. Novara 48560 - Albo Imp-Exp NO 00

PAOLO ASTORI SpA - Via Mirabella, 9 28013 MAGGIATE SUP. - GATTICO (NO) - ITALY Tel. +39 0322 838847 - Fax +39 0322 880198 www.paoloastori.com

# Certificate of Test

Manufacturer:

Paolo Astori spa, Via Mirabella 9, 28013 Gattico (NO), ITALY

Report number:

Date performed: Inspector:

2014-04-29

MATTIAS, VALLETTO

Procurement spec:

NASM25027

NUT, SELF-LOCKING, 250F, 450F, AND 800F

Part code:

10AD25A307N13

Part number:

MS21059L3

Product standard:

MS21059 NASM21059

NUT, SELF-LOCKING, PLATE, TWO LUG, FLOATING, LOW HEIGHT, ALLOY STEEL, 125KSI, 450F

Revision level:

see certificate of conformity

Batch number:

57802

Batch quantity:

284200

Manufacturing date:

2014-04-28

Additional cross-references:

NAS1031A3 / NAS1031P3 / NAS686A3

Customer:

see certificate of conformity

Purchase order:

see certificate of conformity

Quantity delivered:

see certificate of conformity

# **Statement of Conformity**

This is to certify that parts have been produced, controlled and accepted according to the requirements of the applicable specification called by the purchase order and/or the applicable standard drawing. Material, heat and surface treatements and manufacturing processes are the same as those used for the qualification approval. Samples for tests have been randomly selected from the production batch covered by this document. Country of origin is Italy. This report shall not be reproduced except in full, without the written approval of Paolo Astori spa.

### Disclaimer 2

All claims regarding the parts in subject must be reported to seller promptly. Credit or replacement of parts may be limited to those parts for which traceability has been maintained by the buyer. The seller's manufacturing lot identification number and return authorization (RMA) must accompany all returns. Any discrepancy claimed by the Customer must be made in writing to seller not later than ninety (90) days after the shipping date. The liability of seller on parts found to be defective is limited to replacement or rework of such goods, at seller option, and in no case is to exceed the invoiced value of such goods. Under no circumstances will seller be liable for damages or costs incurred by buyer or subsequent user beyond the invoice value of the parts in subject.

per COSTRUZIONI AERONAUTICHE

COMPANY WITH QUALITY MANAGEMENT SYSTEM CENTIFIED BY DNV = EN 9100:2003 = Capitale Sociale € 120.000,00 int. vers. Cod. Fisc., Part. I.V.A., e R.I. Novara 00111940037 R.E.A. Novara 48560 - Albo Imp-Exp NO 009081

PAOLO ASTORI SpA - Via Mirabella, 9 28013 MAGGIATE SUP - GATTICO (NO) - ITALY Tel. +39 0322 838847 - Fax +39 0322 880198 www.paoloastori.com

# 3 Components and raw materials

Component name	Component batch	Material batch	Heath	Material spec
BASKET	57376	-3079		SAE1042 (MEQU13/01C)
NUT	57801	-3236	000B1736	SAE1042 (MEQU13/01C)

# 4 Finishing

Component name	Process	Specification		
BASKET	CAD PLATING	AMS-QQ-P-416C		
BASKET	LUBRICATION	NASM25027		
NUT	CAD PLATING	AMS-QQ-P-4160		
NUT	LUBRICATION	NASM25027		

# 5 Measures

# 5.1 SELF LOCKING DEVICE EXAMINATION

Unit of measure: ATTR

#2	#3	#4	#5	#6	#7	#8	#9	#10
ОК	ОК	ОК	ОК	ОК	ОК	ОК	ОК	OK
ОК	ОК	ОК	ОК	ОК	ОК	ОК	ОК	ОК
ОК	OK	ОК	ОК	ОК	ОК	ОК	ОК	OK
OK								
	OK OK OK	OK OK	OK OK OK OK OK OK	OK OK OK OK OK OK OK	OK         OK         OK         OK         OK           OK         OK         OK         OK         OK	OK	OK         OK         OK         OK         OK         OK         OK         OK           OK         OK         OK         OK         OK         OK         OK         OK	OK         OK<

Number of samples tested: 32

# 5.2 THREAD FIT

Unit of measure: ATTR

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
ОК	OK	OK							
ОК	ОК	ОК							

Number of samples tested: 13



Page: 1 of 1

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.KLXaerospace.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

#### **Material Certification**

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to KLX Aerospace Solutions.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: 27404

LNE# QUANTITY U/M PART-NUMBER

50 EA NAS6604D16

CUST REF#

LOT-NUMBER

MANUFACTURER

CCODE MPR DATE EXP DATE

32557

CALIFORNIA SCREW PRO 8Z507

Jason Lewis

Senior Director, Global Quality

Inv # 02/17/15

# CALIFORNIA SCREW PRODUCTS CORP.

#### 14957 GWENCHRIS COURT

PARAMOUNT, CALIF. 90723-3423

Job Number 225570 CAGE NUMBER : 82507 BAB/AG/30235 / KAA Airbus UK Approval No. AUK/SA/30144 TEST REPORT Shipped Quantity\*: 12500 NAS6604D16 Rev Part Number : 25500 Cust. Purchase Order Number: 0JNV07 Mfg Ouantity: : B/E AEROSPACE CONSUMABLE MANAGEMENT Customer Matl Spec: AMS 6322 REV. N Thread Size & Form : ,250-28 UNJF-3A Procurement Spec : NAS 4002 REV. 10 Surface Finish Spec : AMS-QQ-P-416 REV. C : AS 8879 REV. D Item Description: Bolt Thread Spec Sample Size Spec. : NAS 4002 REV. 10 Heat Number: 10179840 : AMS2759/1 REV. E Heat Treat Spec Actual piece count is within \*/ 2% of the shown lot quantity Mgmtc Permeability N/A NOM-DESTRUCTIVE TESTS / SUBCONTRACTED (SEE CERTIFICATION) Sample Size 315 specimens Inspection Results: Accept : 315 Reject : 0 specimens Fluorescent Penet. : N/A Magnetic Particle : ASTM E1444M-11 METALLURGICAL EXAMINATION RESULTS Reject : 0 Accept : 3 Sample Size : 3 specimens MICRO STRUCTURE : Accept : Accept : N/A HEAD STRUCTURE : Accept TAPS GRAIN SIZE SEAMS : Accept CARBURIZED Accept DECARB : Accept FILLET COLD WORKED : Accept THREAD RIN OUT Accept CRACKS Accept GRAIN FLOW HEAD GRAIN FLOW THREAD : Accept : Accept MECHANICAL TESTS RESULTS Minimum Req.: 6470 ULTIMATE TENSILE STRENGTH (lbs.) - Loc. of Failure: Threads Sample Size : 10 specimens Accept : 10 Reject : 0 Maximim Req.: 8. 7422 7339 7441 7710 7508 6. 7315 7351 7340 N/A 15. N/A 16. N/A 10. 7289 11. N/A 12. N/A 13. N/A 14. 9.22 7513 N/A 20. N/A 21. N/A 22. N/A 23. N/A N/A 19. : N/A 18.7 +5 N/A 32. N/A 29. N/A 30. N/A 31. N/A 27. N/A 28. N/A N/A 26. 9300 SHEAR (1bs | S/D DOUBLE | Sample Size : 10 specimens Accept : 10 Reject : 0 Minimum Req 10485 10306 10237 10034 5. 6. 10289 10085 3. 10056 1. N/A 14. A/A 16..... N/A N/A 15. N/A 12. N/A 22. N/A 23. N/A N/A 20. N/A 21 17. N/A 18. N/A 19. N/A 27. N/A N/A 28. N/A 29. N/A 26. Hardness Results Hardness Req. RC : 36-40 Sample Size : HARDNESS TEST STRESS RUPTURE TEST \_ N/A Load (Lbs.) : 0 Temperature (P) : 0 Periodic test; REF Job No. Hours Sample Size : PATIGUE TEST Low Load (lbs.) : . 0 High Load (lbs.) 0 Sample Size : 0 Load (Lbs/in **建物 被政治性**与中心在一个工程联络第 DFAR 252 225.7009 Load (Lbs/in) \_ N/A COMPLIANCE STATEMENT OF CONFORMANCE: This report relates only to items inspected/tested. Deviations from standard test methods, if any, are noted, and results from subcontracted inspection or testing, if any, are identified. All items were manufactured in the USA under a quality management system, which complies with ISO 9001 and with AS 9100. CALIFORNIA SCREW PRODUCTS CORP, hereby states: That the above product is mercury free; that the above listed lot has been produced, sampled, tested, inspected and marked in accordance with all require-

> MARIAELENA TORRES

CALIFORNIA SCREW PRODUCTS CORPORATION.

Form QCSP019 Form Revision Date: 06/06

B/E Aerospace, Inc. - Consumables Management

ments and that the product complies with all specification and contract requirements; that evidence of which is in the files of

<sup>2</sup>Self Release

Signature and Stamp:

of our company subject to examination. This report shall not be reproduced except

Date:

America tener

FINAL INSPECTOR (Name, Signature, Stamp and Date)

unless authorized in wr

in full.

FEB 0 4 2812



WORK ORDER 093673

HEAT NO. 101798404 SALES ORDER / RLS 846042 / 1 ISO 9001-2000 REGISTERED

CERTIFICATION

MECHANICAL TESTING

**CERT # 911.01** 

**Cal Screw Products** 14957 Gwenchris Ct. Paramount, CA 90723 USA

T/N325570

**CERT# 911.01** 

CUSTOMER P.O. CUSTOMER PART QUANTITY **CARRIERS** LADING NO SHIPMENT DATE 122529/ H1260/ 2,932 Lbs 00098869 08/14/2012 SPECIFICATION C048740-102510A A-8740, AQ, &KFG, CHQ/WIRE, SAIP Zinc Phosphate, Lime & Stearate Coating, Size:0.250/0.252/Specifications: AMS 2301K, AMS6322N, MIL-S-6049A, AMEND 1, AMS-S-6049-A **CERTIFICATION REQUIREMENTS Chemical Properties** C Si Mn ₽ Cu Ni Ma 25 83 .009 . 0064 . 094 . 534 22 Physical Properties Grain Size Jominy 1 Jominy 2 Jominy 3 Inclusions Macro Cleanliness Mill Source 6 J5=54 J8=47 J10=44 32-R1-C2 GOOD Charter Country of Origin USA - DFAR Compliant **Mechanical Properties IEST** UNITS Regulte **Tensile Strenath** KSI 82.2 **Yield Strength** KSI 69.9 % Elongation % 25 % Reduction of Area % 69.8 Rockwell Hardness B Scale HRB (s) 85 4 2012 DFAR 252,225 7009 COMPLIANCE

Merchandise covered by this invoice is warranted to be free from defects in workmanship or material but not for any specific length of time, type or measure of service. No claim for allowance will be recognized unless presented in writing within 10 days time after receipt of material. Our maximum liability for any claim predicated upon defective merchandise is limited to replacement of it, or to repayment of the purchase price thereof, as we elect. Material cut to specific length or size cannot be returned for credit and request for cancellation of such orders will not be considered if manufacture has been commenced. Buyer, by acceptance of the merchandise covered by this invoice, agrees to the foregoing terms and conditions and those set forth on the reverse hereoffing of false, fictitious or fraudulent statements or entires on this document may be punished as a felony under Federal statutes including Federal taw. Title 18, Chapter 47.

REPRODUCTION OF THIS CERTIFICATION IS NOT ALLOWED UNLESS IN FULL.

Wire Tech, Inc., metallurgical laboratory is accredited in the following test: chemical analysis per ASTM E 415, mechanical testing per ASTM B 3.70, Rockwell hardness per ASTM E 18, metallographic mount preparation per ASTM E 3, decarburization depth per ASTM E 1077, IF1 I 40, inclusion rating per ASTM E 45, decarburization performed as per IF1 I 40.

The reported Chemical and Physical Properties are Met Source results. Transcribed from mill certificates. HBB(W) are hardness results performed with a 1/16" carbide ball. Unless otherwise specified, HBB and HRC results are conversions from ASTM A370 (labes) and 2. "Fest result not covered by our current A2LA accreditation. Tests which have been undertaken by a subcontractor laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, Inc. A2LA accreditation.

laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, Inc. A2LA accreditation.

TEST RESULTS RELATE ONLY TO THE ITEMS TESTED.

DEAD Motori.

"LATEST REVISIONS OF ASTM"

DFAR Material per Clauses 252.225-7014 ALT. 1, 252.225-7009, & 225.003(9)

Material is free of mercury, radium, or alpha contamination.

qtc302 (v1.1)



A Division of Charter Manufacturing Company, Inc.

**EMAIL** 

1658 Cold Springs Road

Saukville, Wisconsin 53080

(262) 268-2400

1-800-437-8789

FAX (262) 268-2570

**CHARTER STEEL TEST REPORT Reverse Has Text And Codes** 

Wiretech Incorporated 6440 East Canning Street Attn: Andre Stephan Los Angeles, CA-90040

N325570

Cust P.O.	6798-3
Customer Part #	8740C1A080-C
Charter Sales Order	70029477
Heat #	10179840
Ship Lot #	4128935
Grade	8740 R SK FG AQ 21/64
Process	HRSA
Finish Size	21/64

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed

					Test I	Results,of	Heat Lot	1017984	10		
Lab Code: 7388 CHEM KWt	C .40	MN .83	.009/	s .006/	SI /	NI .44	CR .53	MO/ .22/	CU /	SN .008	V .001
	AL .024	N .0050	B .0001	TI .001	NB .002						
JOMINY(HRC)	JOM01 56	JOM02 56	JOM03 58	JOM04 55	JOM05 54	JOM06 51	JOM07 49	JOM08 47	JOM09 46	JOM10 44	JOM12 41
IOMINY SAMPI	JOM14 39	JOM16 37	JOM18 35	JOM20 34	JOM24 32	JOM28 30	JOM32 29			•	
IOMINY SAMPL MACRO ETCH S AMS 2301 FREQ AMS 2301 SEVE CHEM. DEVIATIO	E TYPE E URFACE UENCY A RITY AVE ON EXT	37 NGLISH = 1 MA VERAGE RAGE = GREEN =	35 CRO ETC = .00 A	34 H RANDO IMS 2301	32 DM = 1 A FREQUEN VERITY IN		Z9 TCH CENT TIDUAL = . L = .00	00	12	,	·
MACRO ETCH S AMS 2301 FREQ AMS 2301 SEVE	E TYPE E URFACE UENCY A RITY AVE ON EXT	37 NGLISH = 1 MA VERAGE RAGE = GREEN =	35 CRO ETC = .00 A	34 H RANDO MS 2301 S 2301 SE	32 DM = 1 M FREQUEN VERITY IN	30 MACRO E NCY INDIVIDUA esuits of	29 TCH CENTIDUAL = . L = .00 Rolling La	00 ot# 106168			
MACRO ETCH S AMS 2301 FREQ AMS 2301 SEVE CHEM. DEVIATIO	E TYPE E URFACE UENCY A RITY AVE ON EXT	37 NGLISH = 1 MA VERAGE RAGE = GREEN =	35 CCCRO ETC = .00 A	34 H RANDO MS 2301 S 2301 SE	32  DM = 1 M FREQUEN VERITY IN  Test R  t Results	MACRO ENCY INDIVIDUAL	TCH CENTIDUAL = .00  Rolling La	00 et# 106168 4128736,	4128935	Value	
MACRO ETCH S AMS 2301 FREQ AMS 2301 SEVE CHEM. DEVIATIO	E TYPE E URFACE UENCY A RITY AVE ON EXT	37 NGLISH = 1 MA VERAGE RAGE = GREEN =	35 CRO ETC = .00 A	34 H RANDO MS 2301 S 2301 SE	32 DM = 1 M FREQUEN VERITY IN	MACRO ENCY INDIVIDUAL	29 TCH CENTIDUAL = . L = .00 Rolling La	00 et# 106168 4128736,	4128935	Value	TENSILE LAB = 0358-02

Specifications:

Manufactured per Charter Steel Quality Manual Rev 9,08-01-09

Meets customer specifications with any applicable Charter Steel exceptions for the following customer documents: Customer Document - AMS6322N/AMS2301K/COP3010M/BS2S147:1976 CHEM ONLY Revision =

**Additional Comments:** 

DFAR 252,225,7009 COMPLIANCE

Charter Steel Saukville, WI, USA

Rem: Load1,Fax0,Mail0



Page 1 of 1

This MTR supersedes all previously dated MTRs for this order

Janice Barnard Manager of Quality Assurance 03/16/2012

J/N325570

The following statements are applicable to the material described on the front of this Test Reports

- 1. Except as noted, the steel supplied for this order was melted, rolled, and processed in the United States meeting DFAR's compliance.
- 2. Mercury was not used during the manufacture of this product, nor was the steel contaminated with mercury during processing.
- 3. Unless directed by the customer, there are no welds in any of the coils produced for this order.
- 4. The laboratory that generated the analytical or test results can be identified by the following key:

•	/		<del></del>		
L	Certificate Number	Lab Code		Laboratory	Address
	0358-01	7388	CSSM	Charter Steel Melting Division	1653 Cold Springs Road, Saukville, WI 53080
	0358-02	8171	CSSR/ CSSP	Charter Steel Rolling/ Processing Division	1658 Cold Springs Road, Saukville, WI 53080
	0358-03	123633	CSFP	Charter Steel Ohio Processing Division	6255 US Highway 23, Risingsun, OH 43457
	0358-04	125544	CSCM	Charter Steel Cleveland	4300 E. 49th St., Cuyahoga Heights, OH 44125-1004
L	•	•	7.	Subcontracted test perfor	rmed by laboratory not in Charter Steel system

 When run by a Charter Steel laboratory, the following tests were performed according to the latest revisions of the specifications listed below, as noted in the Charter Steel Laboratory Quality Manual:

Test	Specification	CSSM	CSSR/CSSP	CSFP	CSCWCSCR
Chemistry Analysis	ASTM E415; ASTM E1019	Х			×
Macroetch	ASTM E381	X			X
Hardenability (Jominy)	ASTM A255; SAE J406; JIS G0561	X			X
	ASTM E112	X	Х	X	X
Tensile Test	ASTM E8; ASTM A370		X	Х	X
Rockwell Hardness	ASTM E18; ASTM A370	X	X	X	X
Microstructure (spheroidization)	ASTM A892		X	Х	
nclusion Content (Methods A, E)	ASTM E45		X		X
Decarburization	ASTM E1077		Х	х	X

Charter Steel has been accredited to perform all of the above tests by the American Association for Laboratory Accreditation (A2LA). These accreditations expire 01/31/13.

All other test results associated with a Charter Steel laboratory that appear on the front of this report, if any, were performed according to documented procedures developed by Charter Steel and are not accredited by A2LA.

- 6. The test results on the front of this report are the true values measured on the samples taken from the production lot. They do not apply to any other sample.
- 7. This test report cannot be reproduced or distributed except in full without the written permission of Charter Steel. The primary customer whose name and address appear on the front of this form may reproduce this test report subject to the following restrictions:

alt may be distributed only to their customers

Both sides of all pages must be reproduced in full

8. This certification is given subject to the terms and conditions of sale provided in Charter Steel's acknowledgement (designated by our Sales Order number) to the customer's purchase order. Both order numbers appear on the front page of this Report.

9. Where the customer has provided a specifiction, the results on the front of this test report conform to that specification unless otherwise noted on this test report:

ACONIOTED AUG 1 2012 COMPLIANCE

man an

# Certification

**Tri-J Heat Treating** 

327 E Commercial St, Pomona CA 91767

Phone:909-622-9999 Fax: 909-622-1790

Order No.: 31700

Date: 11/07/2012

Entry Date: 11/01/2012

Page: 1

CALIFORNIA SCREW PRODUCTS COR

P.O.Box 228

Purchase Order No.: 125282

Job#: 325570

Material: 8740

**PARAMOUNT CA 90723** 

Phone: 562-633-6626

We are pleased to provide you with the following Certification

Quantity	Part Number / Part Name / Part Description	Pounds
26,000	NAS6604D16 REV 8	648

Heat Treat to Specs - AMS 2759 / 1 REV E

Harden to specific hardness

Insp. Type	Scale	Minimum	Maximum		Scale	Minimum	Maximum	Value
Customer Requi	rements:			Results:				
Hardness	HRC	36.0	40.0	Hardness	HRC	37.0	38.0	6.0

## **Process Steps**

Step: 1 Process: Heat Treat

Treat at 1575 F, Dew point 50, Oil Quench at 130 F.(1 Hr Min)

Step: 2 Process: Temper

900° F, MIN. 2HRS.

Gary Madrigal QC Manager

**Tri-J Heat Treating** 

ISO 9001:2008 REGISTERED

# FINE QUALITY METAL FINISHING, INC.

1640 DAISY AVE., LONG BEACH, CA 90813 · 562-432-2248 · 562-432-0722 · FAX 562-432-7146 FINEQUALITYMETALFINISHING.COM

SOLD

CALIFORNIA SCREW PRODUCTS 14957 GWENCHRIS COURT PARAMOUNT, CA 90723-3423

562-633-6626

SHIP

CALIFORNIA SCREW PRODUCTS 14957 GWENCHRIS COURT PARAMOUNT, CA 90723-3423

DATE	MTERED	SHIPPING NO.	P.O. NO.	CERT. DATE	IVO FROM
(	1/21/13	1/13   104695   127030   0/38/3			
1700	QUANTITY ORDERED		DESCRIPTION		QUANTITY SHIPPED
1	25,500	REV.8 JO# 325570	LBS / 25,500 PCS		

Certifications: Fine Quality Metal Finishing Inc., hereby certifies that the above hapdware was processed in accordance with and conforms to the applicable specifications.

JOHN ESHAND, M

N.D.T. INSPECTOR LEVEL II

PARTS RECEIVED IN GOOD ORDER BY

DATE RECEIVED

PLEASE DATE AND SIGN ABOVE



# HADD-CO-INSPECTION LAB

2420 Amsler Street, Torrance, CA 90505

Toll Free: (888) 339-8472 Phone: (310) 325-7620 Fax: (310) 325-9655

www.haddco.com Email: NDT@haddco.com

NO. 16229

Sold To:

CALIFORNIA SCREW PRODUCTS, INC. 14957 GWENCHRIS CT

PARAMOUNT, CA 90723

P.O. Number:

127236

Job/Lot #:

325570

Completion Date:

1/29/13

# CERTIFICATION

QUANTITY	PART NUMBER	DESCRIPTION
	NAS6604D16 REV. 8	MPI PER ASTM-E-1444M-11 NAS 4002-10 MATL: 8740 PLATED 315 PC SAMPLE OF 25500 PC LOT
		NO REJECTS

This is to certify that 100% of the parts under subject purchase order have been inspected by Magnetic Particle Inspection in accordance with all applicable and/or purchase order requirements.

Inspector:

NOTE: Altering of this certification renders it void.



PAOLO ASTORI SpA - Via Mirabella, 9 28013 MAGGIATE SUP. - GATTICO (NO) - ITALY Tel. +39 0322 838847 - Fax +39 0322 880198 www.paoloastori.com

## 5.3 BEARING SURFACE SQUARENESS

Unit of measure: mm (inch)

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
0.08 (0.0031)	0.10 (0.0039)	0.06 (0.0024)	0.08 (0.0031)	0.07 (0.0028)	0.07 ( <i>0.0028</i> )	0.07 ( <i>0.0028</i> )	0.09 ( <i>0.0035</i> )	0.08 (0.0031)	0.08 (0.0031)
0.10 ( <i>0.0039</i> )	0.09 ( <i>0.0035</i> )	0.09 ( <i>0.0035</i> )							

# Number of samples tested: 13

	Min	Max	Avg
Allowed:	(-)	0.13 ( <i>0.0051</i> )	
Found:	0.06 (0.0024)	0.10 ( <i>0.0039</i> )	0.08 ( <i>0.0032</i> )

# 5.4 SURFACE FINISH, PLATING OR SURFACE TREATMENT

Unit of measure: ATTR

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
ОК	OK	ОК	ОК	OK	OK	OK	OK	OK	OK
OK	OK	ОК							

Number of samples tested: 13

# 5.5 RIVET HOLE LOCATION AND ALIGNEMENT

Unit of measure: mm (inch)

#1	#2	#3	#4	#5
17.47	17.45	17.49	17.48	17.48
(0.6878)	(0.6870)	(0.6886)	( <i>0.6882</i> )	( <i>0.6882</i> )
17.48	17.47	17.47	17.48	17.49
(0.6882)	(0.6878)	( <i>0.6878</i> )	(0.6882)	( <i>0.6886</i> )
17.48 (0.6882)	17.47 (0.6878)	17.46 (0.6874)		

	Min	Max	Avg
Allowed:	17.43 (0.6862)	17.53 ( <i>0.6902</i> )	
Found:	17.45 ( <i>0.6870</i> )	17.49 ( <i>0.6886</i> )	17.47 (0.6880)



COMPANY WITH QUALITY MANAGEMENT SYSTEM CENTIFIED BY DNV = EN 9100/2003 = Capitals Sociale € 120.000,00 int. vers. Cod. Fisc., Part. I.V.A. e R.I. Novara 00111940037 R.E.A. Novara 48560 - Albo Imp-Exp NO 009081

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#### 5.6 HEIGHT OF NUT

Unit of measure: mm (inch)

#1	#2	#3	#4	#5
5.62	5.64	5.63	5.65	5.64
( <i>0.2213</i> )	( <i>0.2220</i> )	(0.2217)	( <i>0.2224</i> )	( <i>0.2220</i> )
5.62	5.65	5.64	5.64	5.64
(0.2213)	(0.2224)	( <i>0.2220</i> )	( <i>0.2220</i> )	( <i>0.2220</i> )
5.62 (0.2213)	5.62 (0.2213)	5.64 ( <i>0.2220</i> )		

Number of samples tested: 13

	Min	Max	Avg
		6.35	
Allowed:	(-)	(0.2500)	
Found:	5.62 ( <i>0.2213</i> )	5.65 ( <i>0.2224</i> )	5.63 (0.2218)

## 5.7 LOOSE OR HANGING BURRS

Unit of measure: ATTR

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
ОК	ОК	ОК	ОК	OK	ОК	OK	ОК	ОК	ОК
ОК	ОК	ОК							

Number of samples tested: 13

# 5.8 ALL OTHER DIMENSIONAL CHARACTERISTICS NOT COVERED

Unit of measure: ATTR

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
ОК	ОК	ОК	OK	ОК					



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# 5.9 AXIAL TENSILE STRENGTH

Unit of measure: N (1b)

#1	#2	#3	#4	#5
11900.00	11550.00	11600.00	11750.00	11650.00
( <i>2675.2264</i> )	( <i>2596.5433</i> )	( <i>2607.7837</i> )	( <i>2641.5051</i> )	( <i>2619.0242</i> )
11850.00	11900.00	11550.00	11800.00	11750.00
(2663.9860)	( <i>2675.2264</i> )	( <i>2596.5433</i> )	( <i>2652.7455</i> )	( <i>2641.5051</i> )
11600.00	11850.00	11900.00	11550.00	11750.00
(2607.7837)	( <i>2663.9860</i> )	( <i>2675.2264</i> )	( <i>2596.5433</i> )	( <i>2641.5051</i> )
11700.00	11600.00	11650.00	11550.00	11900.00
(2630.2646)	( <i>2607.7837</i> )	( <i>2619.0242</i> )	( <i>2596.5433</i> )	( <i>2675.2264</i> )
11850.00	11750.00	11700.00	11650.00	11800.00
( <i>2663.9860</i> )	( <i>2641.5051</i> )	( <i>2630.2646</i> )	( <i>2619.0242</i> )	( <i>2652.7455</i> )
11850.00 ( <i>2663.9860</i> )	11900.00 ( <i>2675.2264</i> )			

## Number of samples tested: 27

	Min	Max	Avg
Allowed:	10946.00 ( <i>2460.7587</i> )	- (-)	
Found:	11550.00 ( <i>2596.5433</i> )	11900.00 ( <i>2675.2264</i> )	11735.19 ( <i>2638.1746</i> )

# 5.10 MAX LOCKING TORQUE 1st CYCLE

Unit of measure: Nm (/b-in)

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
0.96	0.98	1.00	0.98	0.94	0.98	0.96	1.04	1.06	0.92
(8.4967)	(8.6737)	( <i>8.8507</i> )	( <i>8.6737</i> )	(8.3197)	( <i>8.6737</i> )	(8.4967)	( <i>9.2048</i> )	( <i>9.3818</i> )	( <i>8.1427</i> )
0.98	0.94	0.98	0.94	0.96	1.04	0.96	0.94	0.96	1.06
(8.6737)	(8.3197)	(8.6737)	( <i>8.3197</i> )	(8.4967)	( <i>9.2048</i> )	( <i>8.4967</i> )	( <i>8.3197</i> )	( <i>8.4967</i> )	( <i>9.3818</i> )
0.98 (8.6737)	1.02 (9.0278)	0.94 ( <i>8.3197</i> )	0.92 ( <i>8.1427</i> )	0.96 ( <i>8.4967</i> )	0.98 ( <i>8.6737</i> )	0.90 ( <i>7.9657</i> )			

	Min	Max	Avg
Allowed:	(•)	2.03 ( <i>17.9670</i> )	
Found:	0.90 ( <i>7.9657</i> )	1.06 ( <i>9.3818</i> )	0.97 ( <i>8.6147</i> )



COMPANY WITH QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNY = EN 9100:2003 = Capitale Sociale € 120,000,00 int. vers. Cod. Fisc., Part. I.V.A. e R.I. Novara 00111840037 R.E.A. Novara 48560 - Albo Imp-Exp NO 009081

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## 5.11 MAX LOCKING TORQUE 7th CYCLE

Unit of measure: Nm (Ib-in)

#1	#2	#3	#4	#5-	#6	#7	#8	#9	#10
0.68	0.70	0.72	0.70	0.66	0.70	0.68	0.76	0.78	0.64
( <i>6.0185</i> )	( <i>6.1955</i> )	( <i>6.3725</i> )	( <i>6.1955</i> )	(5.8415)	( <i>6.1955</i> )	( <i>6.0185</i> )	( <i>6.7266</i> )	( <i>6.9036</i> )	(5.6645)
0.70	0.66	0.70	0.66	0.68	0.76	0.68	0.66	0.68	0.78
( <i>6.1955</i> )	(5.8415)	( <i>6.1955</i> )	(5.8415)	( <i>6.0185</i> )	( <i>6.7266</i> )	( <i>6.0185</i> )	( <i>5.8415</i> )	( <i>6.0185</i> )	( <i>6.9036</i> )
0.70 ( <i>6.1955</i> )	0.74 ( <i>6.5496</i> )	0.66 (5.8415)	0.64 (5.6645)	0.68 ( <i>6.0185</i> )	0.70 ( <i>6</i> .1955)	0.62 ( <i>5.4875</i> )			

Number of samples tested: 27

	Min	Max	Avg
Allowed:	(-)	2.03 ( <i>17.9670</i> )	
Found:	0.62 ( <i>5.4875</i> )	0.78 ( <i>6.9036</i> )	0.69 ( <i>6.1365</i> )

#### 5.12 MAX LOCKING TORQUE 15th CYCLE

Unit of measure: Nm (lb-in)

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
0.40	0.42	0.44	0.42	0.38	0.42	0.40	0.48	0.50	0.36
(3.5403)	(3.7173)	(3.8943)	(3.7173)	( <i>3.3633</i> )	( <i>3.7173</i> )	(3.5403)	(4.2484)	(4. <i>4254</i> )	( <i>3.1863</i> )
0.42	0.38	0.42	0.38	0.40	0.48	0.40	0.38	0.40	0.50
(3.7173)	( <i>3.3633</i> )	(3.7173)	( <i>3.3633</i> )	( <i>3.5403</i> )	(4.2484)	(3.5403)	( <i>3.3633</i> )	( <i>3.5403</i> )	( <i>4.4254</i> )
0.42 (3.7173)	0.46 (4.0713)	0.38 ( <i>3.3633</i> )	0.36 ( <i>3.1863</i> )	0.40 (3.5403)	0.42 (3.7173)	0.34 ( <i>3.0093</i> )			

	Min	Max	Avg
Allowed:	( <del>-</del> )	2.03 ( <i>17.9670</i> )	
Found:	0.34 ( <i>3.0093</i> )	0.50 (4.4254)	0.41 ( <i>3.6583</i> )

per COSTRUZIONI AERONAUTICHE

COMPANY WITH QUALITY MANAGEMENT SYSTEM CERTIFIED BY DWY = EN 9100:2003 = Capitale Sociale € 120,000,00 int. vers.
Cod. Fisc., Part. I.V.A. e R.I. Novara 00111940037
R.E. A. Novara 48560 - Albo Imp-Exp NO 009081

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# 5.13 MIN.BREAKAWAY TORQUE 1st CYCLE

Unit of measure: Nm (lb-in)

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
0.90	0.92	0.94	0.92	0.88	0.92	0.90	0.98	1.00	0.86
( <i>7.9657</i> )	(8.1427)	(8.3197)	(8.1427)	( <i>7.7887</i> )	( <i>8.1427</i> )	( <i>7.9657</i> )	( <i>8.6737</i> )	( <i>8.8507</i> )	( <i>7.6116</i> )
0.92	0.88	0.92	0.88	0.90	0.98	0.90	0.88	0.90	1.00
(8.1427)	( <i>7.7887</i> )	(8.1427)	( <i>7.7887</i> )	( <i>7.9657</i> )	( <i>8.6737</i> )	( <i>7.9657</i> )	( <i>7.7887</i> )	( <i>7.9657</i> )	( <i>8.8507</i> )
0.92 ( <i>8.1427</i> )	0.96 ( <i>8.4967</i> )	0.88 ( <i>7.7887</i> )	0.86 (7.6116)	0.90 ( <i>7.9657</i> )	0.92 ( <i>8.1427</i> )	0.84 ( <i>7.4346</i> )			

#### Number of samples tested: 27

	Min	Max	Avg
	0.23	-	
Allowed:	(2.0357)	(-)	
Found:	0.84 ( <i>7.4346</i> )	1.00 ( <i>8.8507</i> )	0.91 ( <i>8.0837</i> )

# 5.14 MIN.BREAKAWAY TORQUE 7th CYCLE

Unit of measure: Nm (Ib-in)

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
0.70	0.72	0.74	0.72	0.68	0.72	0.70	0.78	0.80	0.66
( <i>6.1955</i> )	( <i>6.3725</i> )	(6.5496)	( <i>6.3725</i> )	( <i>6.0185</i> )	( <i>6.3725</i> )	( <i>6.1955</i> )	( <i>6.9036</i> )	( <i>7.0806</i> )	( <i>5.8415</i> )
0.72	0.68	0.72	0.68	0.70	0.78	0.70	0.68	0.70	0.80
( <i>6.3725</i> )	( <i>6.0185</i> )	( <i>6.3725</i> )	( <i>6.0185</i> )	( <i>6.1955</i> )	( <i>6.9036</i> )	( <i>6.1955</i> )	( <i>6.0185</i> )	( <i>6.1955</i> )	( <i>7.0806</i> )
0.72 ( <i>6.3725</i> )	0.76 ( <i>6.7266</i> )	0.68 ( <i>6.0185</i> )	0.66 (5.8415)	0.70 ( <i>6.1955</i> )	0.72 ( <i>6.3725</i> )	0.64 ( <i>5.6645</i> )			

-	Min	Max	Avg
Allowed:	0.23 ( <i>2.0357</i> )	- (-)	
Found:	0.64 ( <i>5.6645</i> )	0.80 ( <i>7.0806</i> )	0.71 ( <i>6.3135</i> )



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## 5.15 MIN.BREAKAWAY TORQUE 15th CYCLE

Unit of measure: Nm (Ib-in)

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
0.54	0.56	0.58	0.56	0.52	0.56	0.54	0.62	0.64	0.50
(4.7794)	( <i>4.9564</i> )	( <i>5.1334</i> )	(4.9564)	(4.6024)	(4.9564)	( <i>4.7794</i> )	( <i>5.4875</i> )	( <i>5.6645</i> )	(4.4254)
0.56	0.52	0.56	0.52	0.54	0.62	0.54	0.52	0.54	0.64
(4.9564)	(4.6024)	(4.9564)	(4.6024)	(4. <i>7794</i> )	( <i>5.4875</i> )	(4.7794)	(4.6024)	(4. <i>7794</i> )	( <i>5.6645</i> )
0.56 (4.9564)	0.60 (5.3104)	0.52 (4. <i>6024</i> )	0.50 (4.4254)	0.54 ( <i>4.7794</i> )	0.56 ( <i>4.9564</i> )	0.48 (4.2484)			

#### Number of samples tested: 27

	Max	Avg
0.23	•	
(2.0357)	(-)	
0.48	0.64	0.55 (4.8974)
	(2.0357)	(2.0357) (-) 0.48 0.64

#### 5.16 TORQUE-OUT

#### Unit of measure: Nm (lb-in)

#1	#2	#3	#4	#5
8.00	7.00	7.00	7.60	7.00
( <i>70.8060</i> )	( <i>61.9552</i> )	( <i>61.9552</i> )	( <i>67.2657</i> )	( <i>61.9552</i> )
7.00	8.00	7.80	7.60	7.40
( <i>61.9552</i> )	( <i>70.8060</i> )	( <i>69.0358</i> )	( <i>67.2657</i> )	( <i>65.4955</i> )
7.20	7.60	7.40	7.00	7.20
( <i>63.7254</i> )	( <i>67.2657</i> )	( <i>65.4955</i> )	( <i>61.9552</i> )	( <i>63.7254</i> )
8.00	8.00	7.80	7.20	7.00
( <i>70.8060</i> )	( <i>70.8060</i> )	( <i>69.0358</i> )	( <i>63.7254</i> )	( <i>61.9552</i> )
7.40	7.60	8.00	7.60	7.20
( <i>65.4955</i> )	( <i>67.2657</i> )	( <i>70.8060</i> )	( <i>67.2657</i> )	( <i>63.7254</i> )
8.00 ( <i>70.8060</i> )	8.00 ( <i>70.8060</i> )			

	Min	Max	Avg
	6.78	-	
Allowed:	(60.0081)	(-)	
	7.00	8.00	7.50
Found:	( <i>61.9552</i> )	(70.8060)	(66.4134)



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#### 5.17 PUSH-OUT

Unit of measure: N (lb)

#1	#2	#3	#4	#5
588.00	490.00	510.00	520.00	529.00
( <i>132.1877</i> )	(110.1564)	( <i>114.6526</i> )	( <i>116.9007</i> )	( <i>118.9239</i> )
588.00	568.00	578.00	470.00	480.00
( <i>132.1877</i> )	( <i>127.6915</i> )	( <i>129.9396</i> )	( <i>105.6602</i> )	( <i>107.9083</i> )
520.00	549.00	588.00	578.00	540.00
(116.9007)	( <i>123.4201</i> )	( <i>132.1877</i> )	( <i>129.9396</i> )	( <i>121.3968</i> )
549.00	569.00	588.00	578.00	461.00
( <i>123.4201</i> )	( <i>127.9163</i> )	( <i>132.1877</i> )	( <i>129.9396</i> )	( <i>103.6369</i> )
500.00	559.00	569.00	540.00	588.00
(112.4045)	( <i>125.6682</i> )	( <i>127.9163</i> )	( <i>121.3968</i> )	( <i>132.1877</i> )
579.00 ( <i>130.1644</i> )	588.00 ( <i>132.1877</i> )			

#### Number of samples tested: 27

	Min	Max	Avg
Allowed:	445.00 (100.0400)	- (-)	
Found:	461.00 ( <i>103.6369</i> )	588.00 ( <i>132.1877</i> )	546.81 ( <i>122.9289</i> )

#### 5.18 DISCONTINUITIES

Unit of measure: ATTR

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
OK	ОК	ОК	ОК	ОК	ОК	OK	OK	OK	OK
OK	ОК	ОК	ОК	OK	ОК	ОК	ОК	ОК	ОК
OK	ОК								
OK	ОК								

Number of samples tested: 32

## 5.19 23-HOURS STRESS EMBRITTMENT

Unit of measure: ATTR

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
									OK	



# GIUSEPPE & F.LLI BONAITI S.P.A.

NASTRO E FILO DI ACCIAIO

Sede legale e amministrativa: Piazza Verdi, S/A 23801 CALOL ZIOCOFITE (LC) tel. 0341 633080 fax 0341 633081 internet: www.bonaltigluseppe.it e-mail: into@bonaltigluseppe.it

# CERTIFICATO DI CONTROLLO

Nr del 5744 29/05/13

(Tipo 3.1 secondo norma EN 10204:2004 )

Spett.
PAOLO ASTORI SPA
VIA MIRABELLA 9

Vs.Ord. 22364 del 19/01/13 Ns.Com. 33/000213-01 del 28/01/13 DDT N. 2537 del 28.5.13

28013 MAGGIATE SUPERIORE NO
PRODOTTO
Cod.
WASTRO C453 SAB1042 IM. 35,000,60

PROULTATI PROVE

RAW MATERIAL LOT

POGLIO DI LAVORAZIONE

FDL LA 2013 001795

Documento H. 1174 del 27/05/13

Prove N. 001
RESISTENZA A TRAZIONE N/MM2 510
ALLUNGAMENTO & A80MM. 27,83
CARICO UNIT.SCOST.PROP. RPO.2 360,00
PIEGAMENTO TRASVERSALE 180° NO ROTTURA

Certifichiamo che il prodotto è conforme alle richieste della conferma d'ordine.

LABORATORIO PROVE

U. Dhar

ANALISI COLATA

(Verifica effettuata dal fornitore materia prima)

L. 41045 / 001 . E Colata 90074185 N1 Cr Cu 8 P 81 0,001 0,003 0,260 0,020 0,010 0,003 0,020 0.230 0,460 0,680

ALOGS REV.2



# GIUSEPPE & F.LLI BONAITI S.P.A.

NASTRO E FILO DI ACCIAIO

Sede legale e amministrativa:
Plazza Verdi, 3/A
23801 CALOLZIOCORTE (I.C)
tel. 0341 633080 fax 0341 633081
internet: www.bonaitlgiuseppe.il
e-mail: info@bonaitlgiuseppe.il

Nr 11053

25/10/13

CERTIFICATO DI CONTROLLO

(Tipo 3.1 secondo norma EN 10204:2004 )

Spett.

PAOLO ASTORI SPA VIA MIRABELLA 9 28013 MAGGIATE SUPERIORE NO Vs.Ord. 24448 del 23/07/13

Ns.Con. 33/001810-02 del 23/07/13

DDT N. 4917 del 29\_11

PAOLO ASTORI SPA

PRODOTTO

Cod

NASTRO C45E SAE1042 MM.62,0X0,85

-3736

RAW MATERIAL LOT

RISULTATI PROVE

FOGLIO DI LAVORAZIONE

FDL LA 2013 004329

Documento N. 13688 del 22/10/13

Prova

RESISTENZA A TRAZIONE N/MM2 486
ALLUNGAMENTO % A80MM. 26,40
CARICO UNIT.SCOST.PROP. RPO.2 340,00
PIEGAMENTO TRASVERSALE 180° NO ROTTURA
PROVA
RESISTENZA A TRAZIONE N/MM2 510
ALLUNGAMENTO % A80MM. 26,89
CARICO UNIT.SCOST.PROP. RPO.2 358,00
PIEGAMENTO TRASVERSALE 180° NO ROTTURA

Certifichiamo che il prodotto è conforme alle richieste della conferma d'ordine.

LABORATORIO PROVE

A. Putzu

**ANALISI COLATA** 

(Verifica effettuata dal fornitore materia prima)

Colata 000B1736 L. 41185 / 002 . E N1 Мо Cr 5 Al P Mn 81 0,028 0,043 0,003 0,003 0,284 0,010 0,003 0,029 0,674 0,194

ACOM 008 REV2



Test report 2.2 DIN EN 10204

Ma. (A03) Page Deta

1/1 23.02.2013

No. (AE7) Percha: (AOS)

33/90/000116 10.01.2013 Na.(AUT)
Guiseppe & Frat. Bonaiti SpA Cutomer
23081 CALOLZIOCORTE (LC) (AUT)

Guiseppe & Frat. Bonaiti SpA 23081 CALOLZIOCORTE (LC) ITALIEN

Hot rolled wide strip Product (201)

0001172537

Read grade and terms of delivery C45S
DIN EN 10132 - T.4 04/2003
CHN1/2451 R.2 03.05.11
DIN EN 10051:2011-02
3

WS

mm x mm·

N	lateri	81 CISTS (801-894)	 	
			Coad. of delivery (BIO4)	Thickness x Width (808–811)

1	(B9E)	(807)	(BID)	(504)	(539-511)
03 03 03	1 1 1	201955 201956 201957	00074185	ממ	3,00 x 1300
Σ		Weight 56.05	90 kps	15: es roded	

- 1	albe	ons	lvele	fron Asia

Ladie an	alysis	70-089								
Haet No. (907)	C 9 0,83~0,74	Si 8 8,18-8,40	6 - 6 to 5 to	P % £4,035	S % £4,036	Al 8	Cu 8	Cr %	N1 8 0.10-6.25	Mo 8
00074185	0,460	0,230	0,680	0,010	0,003	0,020	0,020	0,260	0,040	0,003
Heat No. (B47)	V B									
00074185	0,001									

Steel making: Basic oxygen process

Our products are free of radioactive substances and do not exceed the clearing limit value of 100 Bg/kg, which guarantees the compliance with limit values given in the Radiation Protection Ordinance(StrlSchV) for the unrestricted clearance of solid material(StrlSchV Annex III, Section 5) for ferrous nuclides.

ut. 11

Kratz



Test report 2.2 DIN EN 10204

Ne. (A93) Page

1/1 21.05.2013

No. (A07) 33/90/000163 02.03.2013 No. (A07)
PUTCHSSST GUISEPPE & Frat. Bonaiti SpA Cabbonst (A08) 1TALIEN (A08)

Thickness x Width

2,00 x 1300

(809-811)

Guiseppe & Frat. Bonaiti SpA 23081 CALOLZIOCORTE (LC) ITALIEN

Hot rolled wide strip Product

Works order No. (A06)

mm x mm '

Inspection (A05) WS

(801)

000B1736

Material data (861-899) Product No. Cood. of defivery Quantity Heat No. (866) (B07) (804)

Ū 48.700 U: asrofled Weight (B12) kgs

Ladle analysis concern

Heet No. (807)	C & 0.63-0.74	Si % 0,15-0,40	Mr. & 0.00-0.90	P % ≤0.035	S % ≤0,035	A1 %	Cu &	Cr %	N1 8 0.10-0.75	MO 8
000B1736	0,485	0.194	0,674	0,010	0,003	0,029	0,028	0,284	0,043	0,003
Heat No. (807)	V %									
	0,003									

Steel making: Basic oxygen process

Our products are free of radioactive substances and do not exceed the clearing limit value of 100 Bg/kg, which guarantees the compliance with limit values given in the Radiation Protection Ordinance(StrlSchV) for the unrestricted clearance of solid material(StrlSchV Annex III, Section 5) for ferrous nuclides.

We hereby certify that the delivered material complies with the terms of the order. (281)

Cy (ADA)

Salzgitter (Rachstald GmbH Eisenhüttenstr. 99 D-38239 Seleginer LAGIJ

Inspection Representative

Kratz